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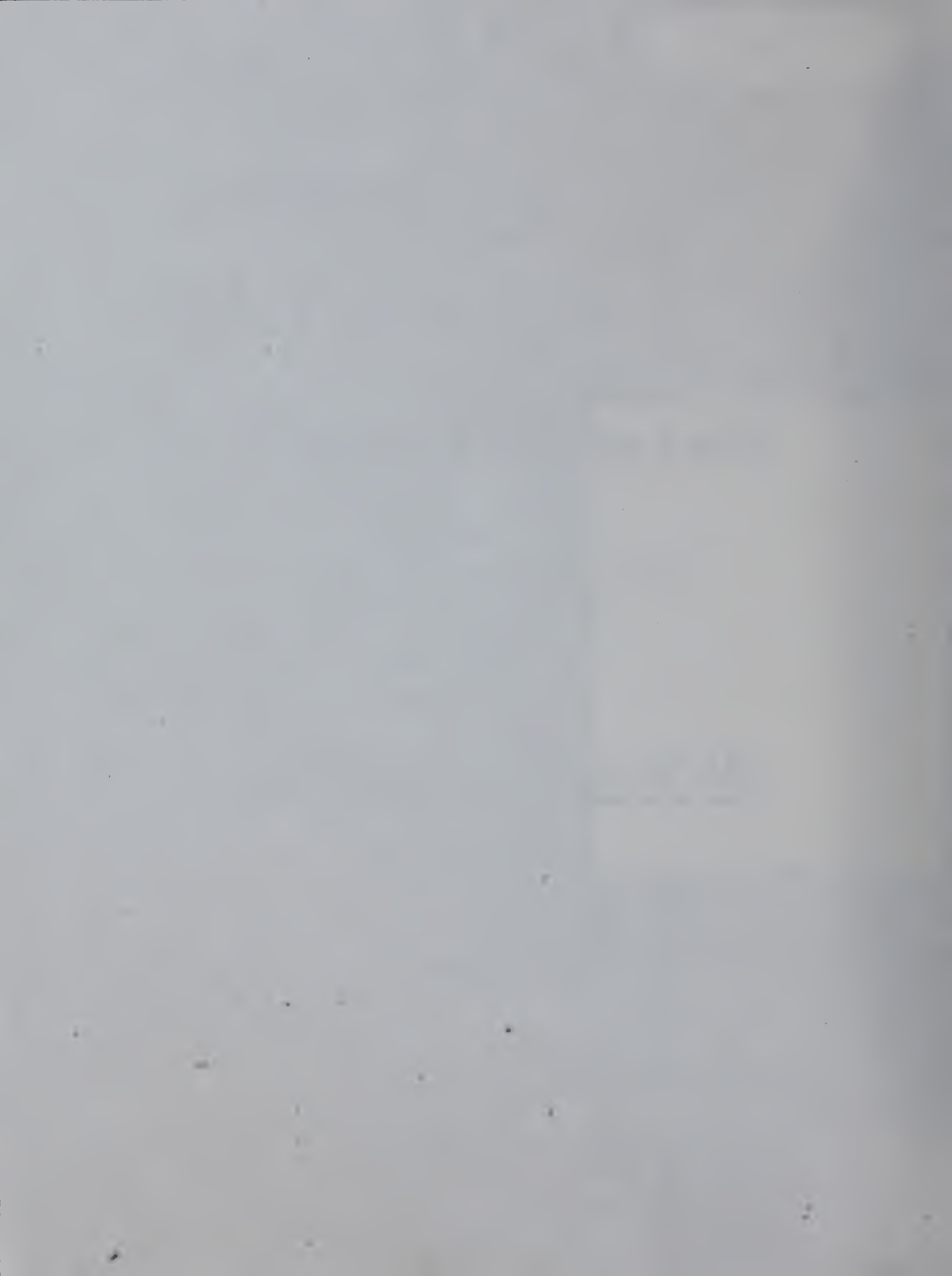
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Port of San Francisco



10-Year Capital Plan



**PORT OF SAN FRANCISCO 10-YEAR CAPITAL PLAN
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I. EXECUTIVE SUMMARY

Introduction

The Port of San Francisco is one of the most diverse and vital ports in the nation. Commercial operations include restaurants, retail shopping, professional sports, and diverse maritime operations as well as regional transportation facilities. Port assets that are home to these operations include 39 pile-supported pier structures, 80 substructures including marginal wharves connecting the piers, 245 commercial and industrial buildings, over three miles of streets and sidewalks, and other assets such as drydocks, cargo cranes, and railroad track.

The Port enjoys numerous historic buildings, including the finger piers built between 40 to 100 years ago. In 2006, the State of California recommended that the National Park Service list the Embarcadero Historic District including piers along the northeast waterfront on the National Register. The Pier 70 area also includes 35 buildings and many other features recognized to be of historic significance.

When the State of California transferred the Port to the City in 1968, the Port's assets were in poor condition. The City was also required to assume \$55 million of the State's bond debt, which hampered the Port's ability to make capital improvements to its assets.

The age and condition of Port facilities, combined with their construction on filled tidelands in a high-risk seismic area, creates a stark challenge for the Port. Complicating this vulnerability is the fact that Port assets are reaching the end of their useful structural life at the same time. Together, these factors constitute a looming public resource and financial crisis for the Port.

The goal of this 10-year Capital Plan is to provide a basis for pursuing public funding and public/private partnerships to address the Port's critical capital needs, and to prioritize spending based on public safety, fiscal responsibility, and the Port's mission. The Plan will help identify facilities and/or piers that the Port may need to close.

The capital projects in this plan quantify the Port's backlog of outstanding capital needs, arising from deferred maintenance and code (mostly seismic) work; it does not estimate the ongoing cost of maintaining capital assets that have properly reached the end of their lifespan. Such capital renewal work will be identified in future iterations of this report.

Port staff made other significant choices in developing the Capital Plan. The Plan employs an expedited facility review model rather than a life-cycle model, because the City's life cycle model has never been used for a seaport, and life cycle modeling does not capture code compliance costs such as seismic upgrades.

This report uses specific engineering or developer estimates where available, and otherwise uses per-unit costs developed by Port staff, based on prior Port projects. All estimates for capital projects were screened through collaborative processes including Port Divisions.

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That said, estimates made for capital planning purposes are imprecise by nature. Thus, the estimates in this report are largely suitable for *planning purposes only*; prior to commencement of capital work, specific engineering estimates suitable for bidding contracts will be developed, which may produce different cost estimates.

The 656 projects in the Capital Plan database were ranked based on 12 priorities, yielding a score between 1 and 100. For each project, Port staff assessed whether the project will:

Address a facility with use restrictions?	Provide return-on-investment?
Address a code compliance condition?	Provide a high-yield-per-dollar?
Address regulatory compliance?	Affect facilities that attract people to the waterfront?
Protect existing revenue streams?	Affect maritime facilities?
Create new revenue streams?	Protect natural and cultural resources?
Reduce the Port's liability?	
Affect an existing facility?	

Additional interdivisional staff review of projects on a case-by-case basis resulted in further refinement of project rankings.

The Port's Needs Assessment

Most of the need for capital work at the Port lies in the Southern and Northeastern waterfront regions, as well as in the South Beach region of the Port's waterfront, as those regions are defined in the Port's Waterfront Land Use Plan:

<u>Region</u>	<u>Amount Needed</u>	<u>%</u>
Southern	\$406,145,000	35
Northeast	249,231,000	22
South Beach	230,200,000	20
China Basin	109,706,000	10
Fisherman's Wharf	64,306,000	6
Ferry Building	45,994,000	4
Portwide	38,000,000	3
Other	1,389,000	< 1
Total	\$1,144,970,000	100%

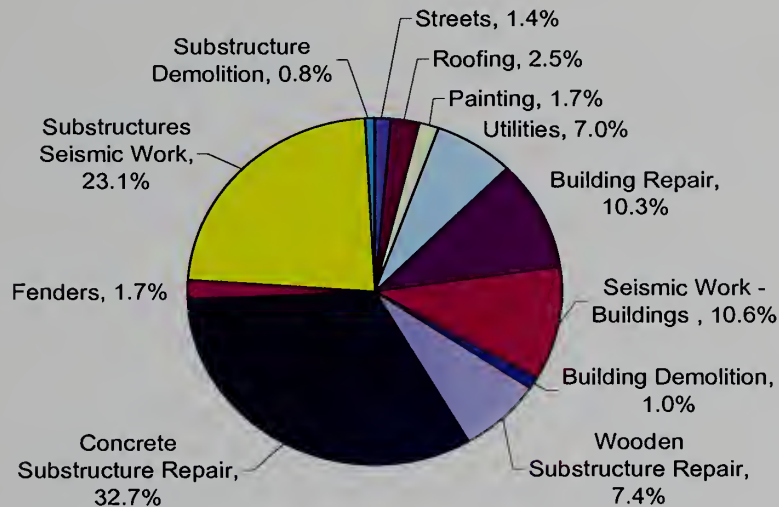
More than a third of the Port's overall need lies in its Southern waterfront, due to the very substantial need of the Pier 70 area, totaling approximately \$252 million, or 22% of overall need. The Port is close to losing the historic buildings at Pier 70 because their condition has become so frail. The Pier 70 work identified in the Capital Plan is a basic level of work aimed at keeping structures operable; this plan does not include full redevelopment and rehabilitation costs necessary to develop a new City neighborhood at Pier 70 (estimated at more than \$1 billion).



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Of the \$1.1 billion in projects identified in the Capital Plan, 73% were estimated using a per-unit approach, and are associated with specific types of work. Other projects, including Pier 70 projects, were not estimated in this manner. The distribution of types of work (e.g., substructure work), where it can be broken down into project types, is as follows:

Graph 1: Distribution of \$600M in "Work Type" Projects



It is noteworthy that over 50% of the costs of these projects (where divisions by work type are feasible) involve concrete substructure repair and substructure seismic work.

Proposed Funding Sources and Uses

The Port's 10-year Capital Plan programs \$410.7 million of the \$1.1 billion total identified projects to be funded through various sources including: Port tenants, the Port's operating budget, Port revenue bonds, development projects, and Infrastructure Financing District bonds.

Port Tenants: For purposes of planning the funding of needed capital work, this report assumes capital work will be completed by a tenant if that tenant has a lease agreement longer than 10 years and lease provisions requiring that they conduct repairs. Conservatively, the Plan assumes that most tenants will perform work in the second five years of the 10-year capital plan. Table IV.1 on Pages 22 - 23 of this report identifies work defined in the Plan as Port Tenant Responsibility, **totaling approximately \$31 million.**

The Port's Operating Budget appropriates \$5 to \$10 million annually to relatively small, annually recurring or maintenance oriented types of work. Subject to approval by the Mayor and the Board of Supervisors, the Plan assumes an ambitious **\$8.8 million**



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budgeted annually (approximately \$86.7 million over 10 years) for dredging, painting, street resurfacing, apron repairs, fender replacements and similar projects.

Revenue Bonds: The Port will fully repay its outstanding 2004 revenue bond debt by FY 2010-11. This plan assumes that the Port will be able to issue approximately \$85.9 million in 30-year term revenue bonds in 2011, which will require annual payments of \$7.9 million (including interest). This will require dedicating an additional \$3.2 million in Port operating revenues above current expenditures for debt service coverage.

Port staff considered the following four issues when determining whether or not a facility was appropriate for revenue bond funding: 1) is the facility profitable and likely to remain so for another 30 years; 2) does the facility have potential to generate additional long-term revenues; 3) are most leases at that facility expiring within the next 10 years, thereby allowing for rental rate increases commensurate with bond-funded improvements thereafter; and 4) is the facility critical to supporting Port operations?

Based on these criteria, Port staff recommend utilizing an estimated **\$85.9 million in revenue bond proceeds** to fund projects, including:

- Pier 9 sub- and super-structure improvements;
- Pier 19 sub- and superstructure improvements;
- Pier 50 Port Maintenance Facility upgrades; and
- Pier 80 Cargo Facility upgrades.

Public/Private Development Agreements: The Port's primary tool to fund facility upgrades has been public-private partnership development projects, which involves a 50 to 66-year lease for Port property, secured financing, and developer project delivery. Successful examples of this approach include SBC Park, the Ferry Building, Pier 1, Piers 1.5, 3 and 5, and Pier 39.

The Plan identifies **\$189.8 million in projects funded by proposed public/private partnerships** currently under consideration, including the Exploratorium at Piers 15-17, the Cruise Terminal at Piers 30-32, and the Piers 27-31 project.

Infrastructure Financing District (IFD): In 2005 the Port sought state legislation authorizing establishment of an IFD, a method of collecting property tax increment. To establish an IFD requires initial authorization by the Board of Supervisors, a proposed infrastructure financing plan, approval by affected taxing agencies and final approval by the Board of Supervisors. This plan identifies **\$17.5 million in IFD bond revenue**, mainly to fund infrastructure work at Pier 70.

Unfunded Projects and Policy Options

After applying the proposed funding sources above, the Port is left with \$734.3 million in unfunded projects. Table V.1 on Pages 37 - 38 identifies currently unfunded projects along the entire waterfront, including the Agriculture Building, Fisherman's Wharf

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improvements and Pier 80, 90 and 96 improvements. Perhaps the most critical unfunded project is \$38.4 million in estimated costs to maintain the City's principal Cruise Facility, Pier 35.

Speculating on *potential* funding options, this Plan identifies **\$493.8 million** or 67% of the \$734.3 million in Unfunded Projects, for future pursuit. Port staff have not secured any of these funds or development agreements. Funding options include public/private partnerships for development opportunities, as well as grant and other public funding.

Even this speculation leaves **\$241** million in needed capital work without funding options. That unfunded work includes Piers 28 & 28.5, Pier 38, Pier 54, Pier 90, and Pier 96. Port staff understand that these facilities may not be optimal candidates for development projects given the magnitude of the cost to rehabilitate them. If Requests for Proposals to redevelop these piers with mixed uses yield no viable responses, the Port may be left with simply using the piers through their useful life and then abandoning or demolishing them. Port staff do not entertain this notion lightly: several of these piers are contributing resources within the proposed Embarcadero National Register Historic District.

Conclusion

The Port of San Francisco faces significant challenges in the years ahead to address the enormous back-log of deferred maintenance and seismic work. The Port is hopeful that its maritime facilities may be eligible for funding in the State's proposed infrastructure bond; however it is a very real possibility that this will not come to be, and that the bond will only cover major cargo-related infrastructure costs in areas such as the Ports of Los Angeles, Long Beach and Oakland.

In short, the Port will be faced with the possibility of closing up to five piers in the not too distant future if it fails to secure public funding and/or development projects to repair and replace deteriorated infrastructure. The Port is also close to losing the historic buildings at Pier 70 due to their frail condition.

While Port facilities were marginally damaged during the 1989 Loma Prieta earthquake (centered in Santa Cruz), a strong, localized quake could have devastating public safety and economic consequences for San Francisco and its waterfront. The City needs its waterfront to be accessible and operable in the aftermath of such a disaster.

Implementation of the Port's Capital Plan will require major changes. Policymakers will need to prioritize capital funding for Port "enterprise" facilities along with other pressing public needs funded by the City's General Fund. The Port must also continuously ensure that it receives the highest fair market rental value for the use of its assets. The public, as the owners of this stretch of waterfront, will need to come forward to help the Port undertake this challenge. Based on feedback from waterfront constituencies, Port staff believe the public may be willing to embrace this challenge.

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Great waterfront cities have a dynamic relationship with their waterfronts. Such a relationship requires risk-taking. Due to the immediacy of the challenges presented by the Port's Capital Plan, the choice for every waterfront stakeholder and constituency is simple: either we embrace a new vision for the waterfront or watch as historic piers buckle under the weight of decades of underfunding, and decay into waterfront blight.

II. INTRODUCTION

OVERVIEW

The Big Picture

The Port of San Francisco is one of the most diverse ports in the nation. Commercial operations on Port property include restaurants, retail shopping, ferry service, commercial fishing, Bay excursion, professional sports, bulk cargo, and cruise ship repair. To support these operations, the Port owns or has responsibility for a great number of capital assets. These assets include 39 pile-supported pier structures, 80 substructures (includes both piers and marginal wharfs between piers), 245 commercial and industrial buildings, over three miles of streets and sidewalks, and elements of the utility infrastructure that support them. Smaller, but no less important, are assets such as drydocks, cargo cranes and heavy equipment used by the Port's maintenance division, which also must be maintained by the Port.

Most finger piers currently in use by the Port or Port tenants were originally constructed around 100 years ago, many in anticipation of the opening of the Panama Canal. Of those, only eight have been rehabilitated since 1950. Most bulkhead and shed buildings atop the Port's piers are 40 to 100 years old and have a rich history. In February 2006, the California State Historical Resources Commission recommended that the National Park Service list the Embarcadero Historic District along the northeast waterfront from Pier 45 in the north to Pier 48 in the south on the National Register of Historic Places. If approved by the Park Service (a decision we expect in May of this year), this historic district would include 20 historic piers and eight other structures of historic significance. The Pier 70 area also includes 35 buildings and many other features also recognized to be of historic significance.

A Looming Problem

When the State of California transferred responsibility for the Port to the City of San Francisco 37 years ago, the Port's capital assets were already in a state of great disrepair. By way of example, 23 of the piers transferred in 1968 were virtually unusable for maritime purposes because of their poor physical condition. Those piers which were structurally sound were only marginally productive because containerized shipping was already replacing breakbulk shipping at the time of the transfer¹.

To further complicate matters, at the time of transfer the City was required to assume \$55 million of the State's bond debt – debt that had not been effectively used to rehabilitate the Port's capital assets. Additionally, the transfer required that the City issue \$25 million in new bond debt. This debt hampered the Port's ability to respond to deterioration of its capital assets.

¹ This information is contained in a 1978 memo from Speaker Leo McCarthy to Members of the Assembly Local Government Committee, a copy of which is on file with the Port.

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The age and condition of Port facilities, combined with their construction on filled tidelands in a high-risk seismic area, creates a stark challenge for the Port. A crisis looms on the horizon because of this reality. Complicating this potential seismic vulnerability is the fact that Port assets are reaching the end of their useful structural life at the same time.

At some point in the near future, the Port will need to invest significant resources in its assets to continue providing current levels of commercial and recreational opportunities. The alternative will be to discontinue use of facilities, which may mean fencing off groups of piers along The Embarcadero.

Complications

Even with adequate funding, the development and rehabilitation of Port capital assets is an extremely heavily regulated affair. The constraints within which the Port must operate include those imposed by the Waterfront Land Use Plan, the Bay Conservation and Development Commission (through its Seaport and Special Area Plans), the California Environmental Quality Act and other state environmental regulations, the California State Lands Commission (interpreting public trust law), the Burton Act, the transfer agreement between the State and the City and County of San Francisco, the San Francisco Board of Supervisors, the City Charter and Administrative Codes, federal regulation, Port tenants and community interest groups.

These constraints complicate the Port's capital plan in that they make the plan somewhat speculative. The disparate interests of all these authorities means that the probability that any one will engage in the process—slowing it down, or even halting it altogether—is significant. Further, at times these regulatory mandates are actually in conflict with one another, as with the Port's mandate to preserve historic buildings and its public trust mandate². The end result is a capital plan that may ultimately be realized on a very different schedule, if not in a different form. As such, we consider a certain measure of inaccuracy with regard to scheduling and completion of work as being “built in” to this report.

The Goal of this Plan

The goal of this plan is to provide a rational, transparent basis for proactively pursuing public funding and public/private partnerships to address the Port's looming capital crisis, as well as a work plan that prioritizes capital spending in a manner that reflects the Port's institutional values, which are 1) ensuring the safety of the public, 2) fiscal responsibility, and 3) fulfilling the Port's mission of attracting people to the waterfront, supporting maritime commerce, navigation and fisheries, and protecting natural and cultural resources. Finally, this plan will help the Port identify facilities and/or piers that it may need to close as a result of insufficient funds.

² The Port's properties are State Public Trust lands that cannot be bought or sold like other state-owned lands. In addition, uses of public trust lands are generally limited to those that are water dependent or related, and include commerce, fisheries and navigation, environmental preservation and recreation. Public trust-consistent uses of Port property do not generate enough revenue to fund the historic preservation of Port structures.

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This is the first time the Port has completed a comprehensive review of all of its capital holdings. The Port will update this 10-year capital plan annually to reflect changes in the condition of the Port's facilities as well as changes in budget and financing assumptions.

METHODOLOGY, ASSUMPTIONS, THE PORT CAPITAL DATABASE

Scope

The Port's Capital Database quantifies the Port's outstanding capital needs, which consist primarily of repair and replacement work required due to deferred maintenance and code compliance (mostly seismic) work. The Port database only estimates the backlog of the Port's capital projects as of 2006, or the "catch up" work; it does not currently provide any estimate of the ongoing capital renewal requirements of the Port. Estimates of how much the Port will need every year to replace capital assets that have reached the end of their operable lifespan will be incorporated into the FY 2006-07 iteration of this plan. However, this topic deserves a brief explanation in this report of the magnitude of the problem that the Port will be addressing.

For example, the capital database currently contains 37 projects totaling approximately \$194 million for repair or replacement of concrete piling and decking on pier substructures. Port engineering staff consider these repairs to have an expected lifespan of approximately 40 years.

This means that the annualized³ replacement / renewal cost for this work alone is an estimated \$4.85 million (\$194 million / 40 years). This does not take into consideration existing concrete substructures that do not currently require repair, but that may need to be replaced in 20-30 years. Add to this the fact that the \$194 million specifically identified as concrete substructure work, at current, represents approximately 17% of the overall need identified in the Port's database, and the magnitude of the annualized need for sustaining the Port's current capital assets begins to become apparent.

The Model

While in prior years, the City of San Francisco has quantified its backlog by other means, in 2006, the City opted to use an integrated life-cycle model for developing a long term capital plan. This model uses life-cycle data only to determine both the ongoing capital renewal costs, as well as the backlog of deferred maintenance work. We chose not to use this model for two reasons. First, the Port's seismic issues are considerable, and life-cycle modeling does not capture code compliance costs. Second, life-cycle modeling depends on having a good understanding of the life expectancy of elements of typical

³ The need for capital renewal is annualized because the construction date and end-of-life date of individual assets varies across the Port's portfolio. Every year, one or more capital assets will reach the end of its intended life. Annualizing costs and allocating a capital renewal budget allows capital renewal to be conducted in a sustainable fashion.

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structures. The database the City used to estimate these expectancies has never been used for a seaport, and lacks information on piers, harbors, seawalls, and other structures which make up the Port's capital holdings.

Instead, we chose to use a simplified individual facility assessment model, using per-unit (usually per square foot) costs of projects with which the Port has had experience to estimate the cost of our future capital projects. We estimated the amount of work required for structures as a proportion of the overall structure (e.g. 30%), and multiplied that percentage by the total square footage of the structure, as well as the cost per square foot for rehabilitation (see below). Performing detailed facility assessments was not a viable option due to the enormous amount of time and cost that would have been involved in performing such work. Additionally, our plan was not expected to identify funding for much of the needed work (and in fact, does not), and many of the projects that are funded in this 10-year plan are funded in the latter half of that plan. This means that precise estimates would be completely outdated for the majority of projects in our database by the time the work was actually put out to bid. Thus, obtaining precise estimates now would ultimately add little value to this process.

There are many projects in the Port's capital database that have cost estimates based on other specific sources. In fact, when calculating a project total, the database defaults toward a manually entered "non per-unit cost estimate" if one has been developed through separate means. In the absence of a good specific estimate, a per-unit estimate is generated. The strong majority of projects in our database have per-unit estimates.

Current Dollars vs. Future Dollars

We chose to represent the Port's Capital Plan in current dollars (2006), both because the City is using this approach, and because it is standard practice, generally speaking, for long-term capital planning. Furthermore, as mentioned earlier, given the current lack of funding and a myriad of other constraints, it would be difficult to escalate our Plan with any credibility.

Definitions / Variables

Project Type – This variable allows data to be sorted by basic type, which are 1) deferred maintenance repair / replacement, 2) code compliance, and 3) capital enhancement.

- Repair and replacement work is defined as that work which is required to put a facility into good working order for its current use, such that routine maintenance will ensure that the full lifespan of the facility will be realized.
- The requirement for seismic upgrade work is more complex, as it is uncertain whether the seismic code would be triggered by any given repair/replacement work. For the purposes of building this database, we determined that the Port should bring its facilities to current seismic standards, whether or not compelled to do so by construction-triggered code since most of the Port's facilities are located in the liquefaction zone for a major earthquake (see Appendix B for an analysis of the Port's seismic risk). Except for those facilities, such as the Ferry

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Building, ATT Park, Piers 1.5, 3 and 5, Pier 1, Pier 48, and Pier 39 that have been recently constructed or reconstructed, Port engineers believe that Port facilities face a high danger of major damage or collapse during a major earthquake.

- Capital Enhancement projects are those projects that fall into neither of the above two categories. These are typically projects that could increase the revenue generation of a particular area or sector of Port operations, or provide a public amenity.

Tenant Responsibility – Indicates that the Port considers a tenant to have contractual responsibility for the project pursuant to lease obligations. For planning purposes, we considered the capital work associated with a property to be the responsibility of a tenant if that tenant is in a long-term lease agreement, “long-term” defined here as a remaining lease term of 10 years or longer.⁴ Additionally, although the Port has chosen to seismically retrofit out-of-date facilities regardless of whether or not construction or use has triggered seismic codes, we have not included seismic work not specifically triggered by code in our definition of tenant responsibility.

Units Type, Units – Usually ‘square feet’, occasionally ‘linear feet’, and the number of those units.

Work Type – Refers to one of the 19 work types the Port’s database uses to generate per-unit cost estimates, such as ‘concrete decking’ or ‘roofing.’

Per-Unit Cost Estimate – This is the value that is associated with the “work type” variable. For example, the work type “Substructure – Concrete Piles” has a per-unit rehabilitation cost estimate of \$144.43 per square foot. Per-unit cost estimates for each type of work are derived primarily from prior projects performed by the Port, but also on accepted industry figures and/or the general experience of the Port’s engineering staff.

Area Affected – This value is usually reflected as a whole percent, and is based on the Port engineering division’s estimation of the portion of the structure which requires rehabilitation in order to bring it into good working order, with maximum life-cycle sustainability.

Relevant to Work Type – This variable provides a way to account for multiple work types within a single project, e.g. a building that is part office space and part warehouse space

⁴ This approach assumes that long-term tenants would be motivated to complete capital work by the mere deterioration of their facilities, irrespective of contractual obligations under the lease. Where this report identifies capital work as the responsibility of a tenant, the tenant has a lease obligation to perform that work. The use of the term “tenant responsibility” in this report is for 10-year capital planning purposes only, and does not preclude the Port from enforcing tenants’ contractual obligations to maintain and repair property in shorter term leases. Further, while this plan may list a given project as being the responsibility of the Port, that designation is, again, for planning purposes only, and not an assumption of liability or responsibility on the part of the Port; the Port reserves the right to enforce contractual obligations with any lessee of that property as well.

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will have different per-unit costs associated with the two sections of the structure. For example, a project for a building could have two line items for this variable, with one reading for “90%” for warehouse utilities and “10%” for office space utilities.

Per-unit Total – This is derived from the following formula: $[Units(\#)] \times [Relevant\ to\ Work\ Type(\%)] \times [per-unit\ cost\ estimate(\$)] \times [area\ affected(\%)]$. For example, in a project for a 2,000 square foot substructure that is supported 100% by concrete piles (as opposed to partially supported by wooden piles), where our per-square-foot estimate for concrete piling is \$144.43/sq. ft, and Port engineers have estimated that approximately 25% of the substructure’s piles should be repaired or replaced, the database would calculate a per-unit sub total for concrete pile work needed at that structure to be \$72,215 ($2000 \times 1.0 \times \$144.43 \times .25$).

Non Per-unit Total – Non per-unit estimates are estimates developed specifically for a given facility, using other than per-unit means of estimation. If a non per-unit estimate is entered for this project, the database will default toward this value, and use it for the Project Total, even if a per-unit cost estimate also exists on that record. Say, for example, a private developer has conducted a detailed engineering study of the 2,000 square foot substructure in the example above and estimated the cost of needed concrete piling work to be \$68,500. This number would be recorded in the “Non Per-unit Total” field, and its source recorded in the notes field for that record.

Project Total – A non per-unit cost estimate for a record if one exists. If none exists, this will be the per-unit total. The database defaults toward non per-unit estimates, because they are more specific than our per-unit estimates. Continuing with the example above, the Project Total field would show \$68,500.

Region – This variable indicates which of the six Port regions, as identified in the Port’s Waterfront Land Use Plan, each project falls within, which allows calculation of regional totals along multiple variables. Those regions include Fisherman’s Wharf, the Northeast Waterfront, the Ferry Building area, South Beach, China Basin, and the Southern Waterfront. Maps of these regions may be found at the end of Section IV of this report.

Validation of Capital Data

The Port developed the list of capital projects through a series of inter-divisional meetings, all of which had a representative from each of the Port’s Engineering, Maritime, Real Estate, Planning, Maintenance, and former Environment, Health & Safety divisions. We conducted this review, as a group, by systematically working through each of the Port’s Facility ID Codes (which together constitute the universe of the Port’s properties), soliciting staff for all capital projects in those areas, and ensuring that none of the Port’s holdings was overlooked.

There were also several reviews that were narrower in scope, of smaller subsets of data. For example, at the end of the group review process, we generated reports listing all

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properties and their status as Port or tenant responsibility, and had the Port's Real Estate division separately review them for accuracy of this single variable.

We also took the additional step of re-reviewing the 20 highest cost substructure projects, in order to be sensitive to the margin of error of per-unit estimations for such large scale, high cost projects. The Chief Harbor Engineer and his staff confirmed or adjusted the official engineering division estimates for the percentage of those structures in need of repair / replacement work.

However, as discussed throughout this report, our best efforts are necessarily imprecise. We can give no assurances as to their accuracy and we caution our readers that actual work may produce different costs.

The Priority Matrix

Given the number of projects we developed for the database, it became clear that the task of ordering all 656 of them from highest priority to lowest priority would be very difficult. This was, in part, due to the sheer number of projects, but also due to the great diversity of projects and unique considerations for some, which made them difficult to compare to one another. To assist with this work, we developed a series of 12 descriptive, binary variables (i.e. "yes-no" variables) that asked questions about whether or not a project addressed one of the Port's areas of priority. We then assigned each variable a point value, such that the total for all 12 variables equaled 100 points.

Port staff met over the course of several months to score each project, assigning a "yes" or "no" to each variable, which the database then used to calculate a total score for each project, between zero and 100 points. This total project score variable then allowed us to list projects for any given area in order of priority score, from highest to lowest. We then used this suggested order as a starting point for further analysis, and made adjustments to arrive at our proposed prioritized list of projects.

The priority matrix variables fall into 3 general categories: Public Safety, Asset Management, and Port Mission.

The Public Safety variables ask the following questions:

- Does the project address a facility that currently has restricted use?
- Does it address a code compliance condition (e.g., seismic, fire codes)?
- Does it address a regulatory compliance condition (e.g. BCDC, environmental regulations)?

The Asset Management variables ask:

- Does the project protect existing revenue streams?
- Does it create new revenue streams?
- Does it reduce the Port's liability?

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- Does it affect an existing asset (as opposed to it being a new facility)?
- Is it a return-on-investment project⁵?
- Is it a high-yield-per-dollar project⁶?

The three Port Mission variables are:

- Does this project affect facilities that attract people to the waterfront?
- Does it affect facilities that provide for maritime commerce, navigation and/or fisheries?
- Does it protect natural and/or cultural resources?

We decided upon the relative weights of the different elements of the Priority Matrix through a collaborative effort, with representatives from each of the Engineering, Maritime, Real Estate, Planning, Maintenance and former Environment, Health & Safety divisions participating.

The result of review of the 12 repair priority variables served only to suggest a preliminary order for approaching capital projects; we ultimately prioritized projects on a case-by-case basis, taking into consideration the entirety of each project. However, beyond the results, the process itself was very valuable. During project review, staff also regularly made adjustments to other elements of project records (beyond the 12 priority variables), which effectively added another measure of quality control to the information in our database.

Our method of prioritization serves a very useful technical purpose for Port staff, though this report recognizes the bounds of that methodology. We understand that matters of current and future policy may supersede the ordering we have set out here, and to that end, this report recognizes that the Port Commission, the Board of Supervisors, and the Mayor must review and approve the capital work we have identified.

⁵ Return-on-investment projects are projects that are not necessarily needed as repairs, but rather as upgrades that improve efficiency, lowering long-term costs. A good example of this would be an upgrade of a lighting system that significantly reduced monthly electricity costs to the Port.

⁶ This variable is intended to capture the idea of “bang for the buck,” and refers to a project where much work can be done with relatively little funding.

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III. THE PORT'S NEEDS ASSESSMENT

The purpose of this section is to provide the reader with a more general view of the Port's overall need. A full specific discussion of the Port's 10-year capital plan can be found in Sections IV and V of this report, as well as in Appendix A.

As noted elsewhere in this report, the Port's assessment of its capital needs included review of 39 pile-supported pier structures, 80 substructures (includes both piers and marginal wharves between piers), 245 commercial and industrial buildings, over three miles of streets and sidewalks, as well as elements of the utility infrastructure that supports them. This review of the Port's capital assets resulted in the development of 656 capital projects, totaling over \$1.1 billion, primarily in needed seismic and deferred maintenance work. This section of the report breaks down some of the larger trends, along a few different axes.

Geographic Breakdown

As illustrated by Table III.1, most of the need for capital work at the Port lies in the Southern and Northeastern waterfronts, as well as in South Beach. The regions listed below are the same regions defined in the Port's Waterfront Land Use Plan, which are illustrated on maps contained in *Section IV Proposed Funding Sources and Uses*.

Table III.1 below shows the Port's need distributed among the six regions of the Port waterfront, as well as those needs that are portwide ("Portwide") in scope, and those that are not readily classifiable by region ("Other"), in order of largest dollar need:

<u>Region</u>	<u>Amount Needed</u>	<u>%</u>
Southern	\$406,145,000	35
Northeast	249,231,000	22
South Beach	230,200,000	20
China Basin	109,706,000	10
Fisherman's Wharf	64,306,000	6
Ferry Building	45,994,000	4
Portwide	38,000,000	3
Other	1,389,000	< 1
Total	\$1,144,970,000	100%

As illustrated above, over a third of the Port's overall repair, replacement and seismic need lies in its Southern waterfront. This is due to the very substantial needs of the Pier 70 area, which lies within the Southern waterfront. Specifically, the Port's estimate for the Pier 70 area totals approximately \$252 million, or about 22 percent of the Port's overall need.

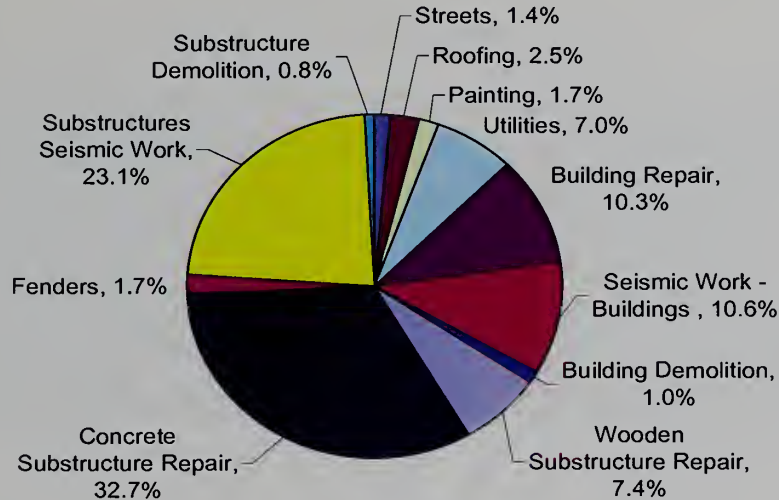
Work Type Breakdown

Of the \$1.15 billion in projects identified in the Port's capital database, approximately 73% were estimated using a per-unit approach, and are associated with specific work

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types. Of the 27% not estimated this way, approximately one fourth is made up of Pier 70 projects⁷. Graph 1 below accounts for both these factors, and only represents a breakdown for the \$600 million in projects that are clearly identifiable to a specific work type.

Graph 1: Distribution of \$600M in "Work Type" Projects



As illustrated above, over 60% of the work-type project need is for substructure work to the Port's piers. Most of the capital work needed at Pier 70 (excluded from the \$600 million represented in this graph) is required to repair and maintain superstructures, i.e., buildings. Thus, this distribution is not necessarily representative of the entire Port Capital Plan.

⁷ Pier 70's unique needs and challenges led us to estimate capital needs for those structures using all-inclusive per unit estimates (i.e. using a single value per-square-foot that includes seismic work, structural work, historic preservation work). Because of the way this value was derived, we cannot separate out the different elements of that work for analytical purposes, so we are unable to include the seismic portion of Pier 70 in Graph 1.

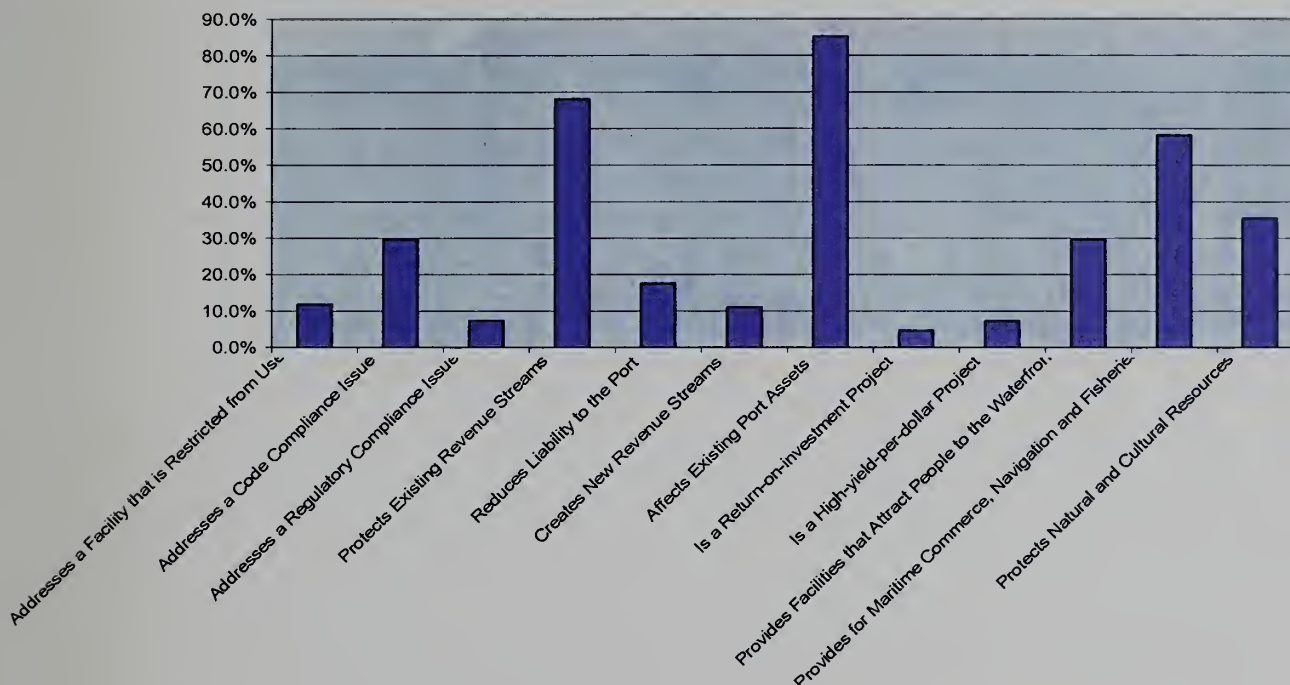


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Priority Type Breakdown

The graph below shows the percentage of the Port's 656 capital projects that have been identified as fulfilling each of the Port's priorities. These variables are not mutually exclusive, so any given project may be associated with a single priority variable, or all 12 priority variables. For further discussion of these priority variables, see the methodology section of the report, Section II.B.

Graph 2: Percentage of Projects in Each Priority Area



This high inclusion of projects in six of the above 12 categories above is illustrative of the larger objectives of the Port's 10-year capital plan. First, the 85% of projects that fit the category **"Affects Existing Port Assets"** are a reflection of the fact that the Port's capital projects are directed toward taking care of existing structures, as opposed to completely replacing them with new ones. This is in part because in most cases, maintaining current capital assets is more cost-effective than completely replacing them. It is also a reflection of the relatively high number of projects (35.5%) that were included in the **"Protects Natural and Cultural Resources"** category. The Port's historically significant structures must be maintained because they cannot be replaced.

The 29.6% of projects that fall under the **"Addresses a Code Compliance Condition"** category (which includes seismic code) reflects the magnitude of the seismic problem facing the Port. As Graph 1 shows, 32% of the \$600 million in work-type projects are seismic in nature. This is substantial, considering that, as noted above, the work-type projects do not capture all the seismic work needed at the Port (e.g. Pier 70's seismic



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needs are not included in that Graph 1 because they are inextricably mixed in with overall building rehabilitation estimates).

The high number of projects falling within the priority categories, **“Provides Facilities that Attract People to the Waterfront”** (29.7%) and **“Provides for Maritime Commerce, Navigation and Fisheries”** (58.2%) simply reflects the amount of capital work needed on facilities that are important to the State’s mandate to the Port and to San Francisco’s maritime industry, as well as San Francisco’s critical tourism industry.

Lastly, the 68.1% of projects that we identified as **“Protecting Existing Revenue Streams”** are a stark reminder of the fiscal consequences of not properly maintaining the Port’s capital assets. Without investment in these projects, the Port will be forced to close facilities, thereby further reducing our current and future financial viability and operational sustainability.

IV. PROPOSED FUNDING SOURCES AND USES

The Port's 10-year Capital Plan identifies \$410.7 million of the \$1.1 billion total identified projects to be funded through various sources including Port tenants, the Port's operating budget, Port revenue bonds, development projects, and Infrastructure Financing District bonds⁸. This section describes each of these sources of funds, the methodology for determining the amount available in the next 10 years, the basis for determining which source could fund which project, and the proposed projects and uses of each funding source.

The pie chart at the end of this section identifies the overall \$1.1 billion need broken down by the total amount funded by each funding source and the total amount unfunded. The maps at the end of this Section identify which piers are funded through each funding source and which ones are unfunded. Please note that a small portion of the unfunded work will be covered through the Port's annual repair and replacement budget⁹.

Port Tenant Responsibility

As noted earlier in this report, we considered the capital work associated with a property the responsibility of a tenant if that tenant is in a long-term lease agreement, "long-term" defined here as having 10 years or longer remaining in a lease obligation. Additionally, although the Port has chosen to seismically retrofit out-of-date facilities regardless of whether or not construction or use has triggered seismic codes, we have not included seismic work not specifically triggered by code in our calculation of tenant responsibility.

To be conservative, we assumed that all but one of the Port tenants would do the identified work in the last five years of the 10-year capital plan. However, it is possible that some if not all of the tenants will make repairs in the first five years.

The following is a list of Port facilities for which a Port tenant is responsible and the estimated costs in the 10-year capital plan excluding seismic upgrade work¹⁰:

⁸ Infrastructure Financing District bonds are discussed in more detail at the end of this section.

⁹ On average, the Port is able to dedicate approximately \$3.5 million annually to repair and replacement projects. See also the discussion below titled, "Port Operating Budget."

¹⁰ Since the State Building Code doesn't require seismic upgrades to these facilities, we've assumed the tenant will not seismically upgrade these Port facilities. Nonetheless, we've included the estimated cost to seismically upgrade these facilities in the capital plan and identify them as unfunded since it's the Port's goal to seismically upgrade all of its facilities. The two exceptions relate to Pier 22.5 and Pier 90 occupied by the San Francisco Fire Department. Since the California Building Code requires fire stations to be seismically secure, we have assumed the Fire Department will fund seismic upgrades in addition to repair and replacement work.

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Table IV.1: Port Tenant Responsibility

Pier	Scope of Work	Total Cost Estimate
Pier 9 – located on the Embarcadero Roadway at Broadway.	Apron repairs	\$367,907
Pier 22.5- Fire Station – located on the Embarcadero Roadway near Harrison Street	Sub-structure and super-structure repairs and seismic upgrades & utility upgrades	2,667,000
Pier 23.5- located on the Embarcadero Roadway near Greenwich Street	Sub-structure and super-structure repairs & utility upgrades	2,103,000
Pier 38.5 – located on the Embarcadero Roadway near Townsend Street	Sub-structure and super-structure repairs & utility upgrades	655,000
Pier 40 ¹¹ - located on the Embarcadero Roadway near Delancey Street	Sub-structure and super-structure repairs, painting, apron repairs, & utility upgrades	17,033,000
South Beach Marina including Java House – located on the Embarcadero Roadway near Delancey Street	Sub-structure and super-structure repairs and interior utility upgrades	32,000
Pier 47 - located on the Embarcadero Roadway near Jones Street	Sub-structure and super-structure repairs & utility upgrades	769,000
Pier 49 - located on the Embarcadero Roadway near Taylor Street	Sub-structure and super-structure repairs & utility upgrades	1,513,000
Pier 90 – Fire Department – located at 3 rd Street and Cargo Way	Sub-structure repairs, super-structure seismic upgrade & interior utility upgrades	200,000
Pier 98 – located near Cargo Way	Install restroom	135,000
World Trade Center located behind the Ferry Building at the foot of Market Street	Super-structure repairs & other pier improvements	994,000

¹¹ The San Francisco Redevelopment Agency (SFRA) leases Pier 40 from the Port through September 2050 to support SFRA's South Beach Harbor operations. However, in conversations with SFRA, they indicated that they wouldn't be constructing all of the improvements at Pier 40. However, they will be undertaking some sub-structure repair work in the next year that has been identified in the Port's 10-year capital plan.

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SWL 302 – located in Fisherman’s Wharf near Hyde Street	Sub-structure and super-structure repairs & utility upgrades	3,941,000
SWL 303 - located in Fisherman’s Wharf near Leavenworth Street	Super-structure repairs & utility upgrades	555,000
Total Port Tenant Responsibility		\$30,964,907

Port Operating Budget

The Port typically appropriates \$5 to \$10 million annually for capital projects. For this 10-year Capital Plan, we assumed the Port will appropriate approximately \$8.8 million annually for capital projects in 2005 dollars. While this is a somewhat ambitious goal, we believe it is obtainable if we further increase annual operating revenues and/or reduce annual operating expenses. This target also provides the Port with an annual financial goal, since revenues not required to cover annual operating expenses are available to fund the annual capital budget.

The basis for deciding which projects to fund through the Port’s operating budget are as follows:

- The project is relatively small – under \$1 million.
- The project is an annually recurring project such as dredging.
- The project is maintenance in nature such as painting, street resurfacing, apron repairs, and fender replacements. We included some of these projects in other funding sources if they might be part of a larger project.

Based on these criteria and the estimated available funding, we’re proposing the following annual operating budget allocations:

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Table IV.2: Annual Operating Budget Allocations

Annual Operating Budget Category	Average Annual allocation 2006 \$
Dredging	\$3,000,000
Annual Facilities Condition Survey, Project Planning, & Design by Outside Entities	300,000
Emergency Facility Maintenance & Repair	1,000,000
Equipment to Support the Port's Maintenance Division	347,125
Street, Sewer, & Sidewalk Repairs	578,925
Annual Repair & Replacement Projects (pier repairs, roof replacement, painting, & utility repairs)	3,536,183
Total Average Annual Allocation	\$8,762,233

We will propose the specific annual capital budget projects from the list of projects in the 10-year capital plan in order of priority for the Port Commission, Mayor and Board of Supervisors' review and approval.

Port Revenue Bonds

The Port will fully repay its outstanding 2004 revenue bond debt by FY 2010-11. As a result, at that time, if net revenues remain constant, the Port will have approximately \$4.7 million available annually to repay new debt. We've assumed the Port will be able to issue approximately \$85.9 million in revenue bonds in 2011 that will require the Port to have a total of \$7.9 million in available Port revenues annually to repay the debt assuming a 6.5% interest rate and a 30-year term. The \$7.9 million is \$3.2 million more than the \$4.7 million that will become available after we pay-off all of the Port's existing debt. Thus, this 10-year capital plan assumes we will be able to increase available Port operating revenues by an additional \$3.2 million by 2011. While this is a somewhat ambitious goal, we believe it is reasonable to expect the Port to achieve it. Again, it provides the Port with an annual financial goal in addition to the \$8,762,233 annual capital budget goal identified above.

In short, this 10-year capital plan anticipates that by FY 2011-12, the Port will be able to generate a total of \$11,962,233 (\$8,762,233 to fund the operating capital budget plus an additional \$3,200,000 to repay new revenue bonds) in surplus operating revenues after

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covering annual operating expenses to fund both annual capital projects and provide additional funding to repay a new revenue bond.

We proposed the following basis for deciding which projects the Port will fund through revenue bonds; however, the final determination will be made by the Port Commission, Mayor and Board of Supervisors:

- The facility is currently a profitable facility and making an investment will help ensure continued profitability for another 30 years. Such determination would ensure that the benefit of new or continued revenues matches or exceeds the cost of long-term debt.
- The facility has potential to generate additional long-term revenues because it is under-utilized and making an investment will help the Port market it to new tenants and/or increase rents.
- The facility's only or major leases expire within the next 10 years which gives us an option to lease it for more than the current square footage rental rate, commensurate with our improvements.
- The facility is critical to supporting Port operations.

Based on the above criteria, we've identified various piers that could be funded with Port revenue bonds beginning in FY 2011-12. However, there are more piers that require upgrades than the \$85.9 million revenue bonds that we have estimated to be able to issue. Thus, before we finalize this capital plan, we should reduce a list of potential projects to those that we propose to fund with available revenue bonds. We can modify that list in subsequent capital plan updates if necessary. Prior to issuance of any new debt, a final list of bond funded projects will be set by the Port Commission, Mayor and Board of Supervisors. But, for planning purposes, it's important to identify which projects we'll fund with revenue bonds.

Table IV.3: Potential Revenue Bond Funded Projects

Pier	Current Use	Rationale for Inclusion in a Future Revenue Bond	Total Capital Plan Cost Estimate
Pier 9 – Embarcadero Roadway at Broadway Street	Mixed use - office space and maritime support facilities on the aprons	The Port earns over \$1 million annually from Pier 9 after deducting direct expenses. It is one the Port's most profitable facilities. The \$17.1M fully funds sub-structure and super-structure repairs, seismic upgrades, and interior utilities.	\$17,100,000

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Pier 19 – Embarcadero at Front St	Warehousing to support maritime activities.	The Port earns over \$500,000 annually from Pier 19 after deducting direct expenses. The current lease expires in December 2008 which gives the Port an opportunity to increase rents particularly if it can make improvements to the facility. The \$16.2 million fully funds sub-structure and super-structure repairs, seismic upgrades, and interior utilities.	16,200,000
Pier 50 – Terry Francois Blvd at Mission Rock St	Port maintenance facility, storage, office and other maritime uses	Pier 50 houses the Port's maintenance facility. Therefore, it is a high priority for the Port to at least repair it such that it can continue to provide that function. The \$26.6 million will cover repairs and seismic upgrades required for the valley between Sheds A& B to allow access to Pier 50 and some sub-structure and superstructure repairs on the rest of the pier.	26,600,000
Pier 80 – Illinois and Cesar Chavez Sts	Bulk and break- bulk cargo facility	Pier 80 is currently under-utilized. There is potential to increase the volume of cargo processed through this facility to increase net revenues. Thus, financing the required repairs could be covered by increased revenues if the Port is better able to market this facility. The \$26 million will cover most super-structure and sub-structure repairs but won't cover the sub-structure seismic upgrades.	26,000,000
Total Potential Revenue Bond Funded Projects			\$85,900,000

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Other Potential Port Projects that Could be Funded with Revenue Bonds

Pier	Current Use	Rationale for Inclusion in a Future Revenue Bond	Total Capital Plan Cost Estimate
Pier 35 – Embarcadero Roadway at Bay St	Cruise Terminal	Pier 35 is currently the Port's primary cruise terminal. When the new cruise terminal at Piers 30-32 opens, the Port plans to continue to use Pier 35 to receive cruise ships on days when the new cruise terminal is fully booked. If we can't secure public funds and/or a development project at Pier 35, we'll consider it for revenue bond funding.	\$38,372,000
Total Potential Port Projects that Could be Funded with a Revenue Bond –			\$38,372,000

Development Projects

For several years, the Port's primary tool to fund upgrades to its facilities has been public-private partnership development projects. A developer enters into a 50 to 66-year lease with the Port for property, secures financing, and is responsible for project delivery. The developer renovates the facility to accommodate new uses such as AT&T Park, the Ferry Building, Pier 1, Piers 1.5, 3 and 5 (currently under construction), and Pier 39. As described in the table below, the Port's 10-year capital plan identifies Port development projects underway in one form or another as funded through development projects. Section V of this report identifies potential development projects for which the Port hasn't issued an RFP to develop the facility nor has it entered into negotiations with a potential developer.

Table IV.4: Development Projects Currently Underway

Pier	Development Project	Capital Plan Scope of Work	Capital Plan Cost Estimate
Piers 15 & 17 – Embarcadero at Green St.	Exploratorium – interactive science museum	Super-structure & sub-structure repairs and seismic upgrades, interior utility upgrades, painting, demolition of the valley, and replacing roofs.	\$56,042,000

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Piers 30-32 – Embarcadero at Bryant St	Cruise terminal, mixed use office, retail and restaurants	Sub-structure repairs and seismic upgrades	65,493,000
Piers 27-31 – Embarcadero at Battery St	Mixed use recreation, retail, restaurants & office space	Super-structure & sub-structure repairs and seismic upgrades, interior utility upgrades, painting, demolition of valley, and replacing roofs.	68,228,000
Total Development Projects			\$189,763,000

Infrastructure Financing District

In anticipation of the Port's 10-year capital plan, in 2005 the Port sought State legislation through Senator Migden's Office authorizing the Port to establish an Infrastructure Financing District (IFD), an alternate method of collecting property tax increment under State law, which does not require a finding of blight¹².

IFDs are authorized under California Government Code 53395 et. seq. (the "IFD Law"). IFD Law allows public agencies to finance public infrastructure improvements by capturing and bonding against tax increment generated in the district after it is established. The City collects possessory interest taxes from Port tenants, in lieu of property taxes.

Public agencies seeking establishment of an IFD must perform environmental review as required under CEQA. Additionally, IFDs function much like redevelopment project areas. In this regard, IFDs do not, on their own, involve tax increases. In contrast to redevelopment law, the IFD Law does not require the public agency to make a finding of blight or require a set-aside of a portion of the tax increment for affordable housing (except when the projects to be financed through the IFD displace housing). Unlike redevelopment, adoption of an IFD does not affect the land use requirements or zoning designations.

To establish an IFD, the public agency must follow a multi-step process. First, the legislative body of the public agency (here, the City's Board of Supervisors) must

¹² Redevelopment can only be used in areas that suffer from adverse physical and economic conditions, defined in the law as "blight." The following types of adverse physical and economic conditions have been observed in redevelopment areas to be examples of blight: aging, deteriorating, and poorly-maintained buildings, sometimes interspersed with well-maintained buildings; inadequate and obsolete infrastructure, (i.e. utilities, storm drainage, sewers, street lighting, and confusing and inefficient street systems); vacant and underutilized land or buildings; and high incidences of criminal activity, sometimes equated with an over-concentration of bars, liquor stores or adult stores.

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approve a resolution of intent to form the district. The public agency must then prepare and distribute a proposed infrastructure financing plan, which must include, among other things, a description of the infrastructure, a limit on the tax increment to be used, and an analysis of fiscal impact. The legislative body must then adopt a resolution approving the proposed infrastructure financing plan, but only after the affected taxing agencies have approved the plan. As of the writing of this report, the City has not adopted an IFD for the Port of San Francisco. We are currently working on issues related to district formulation, including the drafting of authorizing legislation.

The 10-year capital plan assumes that the Port will issue debt in the last two years of the plan because the tax increment needs to accrue before we can issue debt against it. Based on known Port development projects that will increase the City's possessory interest tax collections and an annual receipt growth of \$100,000, we conservatively expect to be able to issue approximately \$17.5 million in IFD bonds.

Proposed Use of Infrastructure Financing District Bond Funds

We currently propose to use proceeds of any IFD bonds to fund a portion of the infrastructure work needed at Pier 70. However, the final determination of the use of IFD bond funds will be made at the time of issuance by the Port Commission, the Mayor, and the Board of Supervisors.

A more detailed description of Pier 70 is contained in *Section V. Unfunded Projects and Policy Options*. The 10-year capital plan programs funds to cover Pier 70 infrastructure costs which consist of \$20 million to construct streets, sewers, water mains, sidewalks, and street lighting. We chose to fund Pier 70 infrastructure work because it consists of traditional public improvements that redevelopment agencies typically fund with tax increment funds. In addition, the Port would be better able to attract a developer for Pier 70 if it can invest Port funds in the infrastructure portion of the project.

Summary of Identified Funding Sources

As noted in the Table IV.5 below, approximately 64% of the identified need is unfunded and the balance is funded among tenant responsibilities, revenue bonds, Port operating budget, development projects, and the Infrastructure Financing District bond funds. The six maps following on pages 31 - 36 identify facilities by proposed funding source, including those for which no funding source has been identified.

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Table IV.5: Total 10-year Capital Plan by Funding Source

<u>Funding Source</u>	<u>Total 10-year Amount</u>	<u>Percent of Total</u>
Tenant Responsibility	\$30,964,907	2.7%
Port Operating Budget	86,563,595	7.6%
Port Revenue Bonds	85,900,000	7.5%
Development Projects	189,763,000	16.6%
Infrastructure Financing District	17,500,000	1.5%
Unfunded	734,276,498	64.1%
Total	\$1,144,968,000	100%

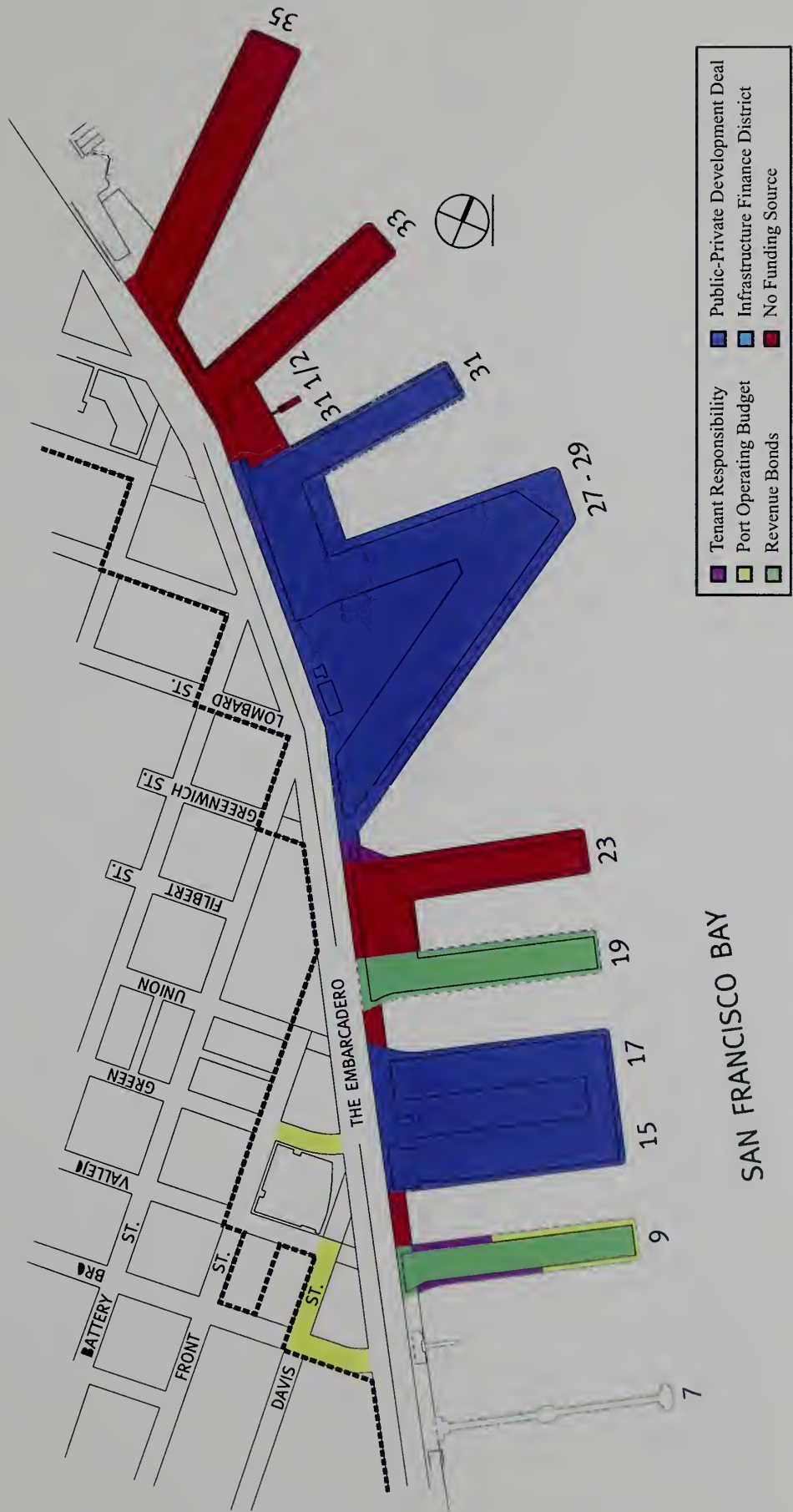
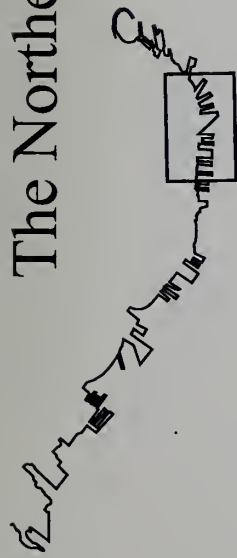


Fisherman's Wharf



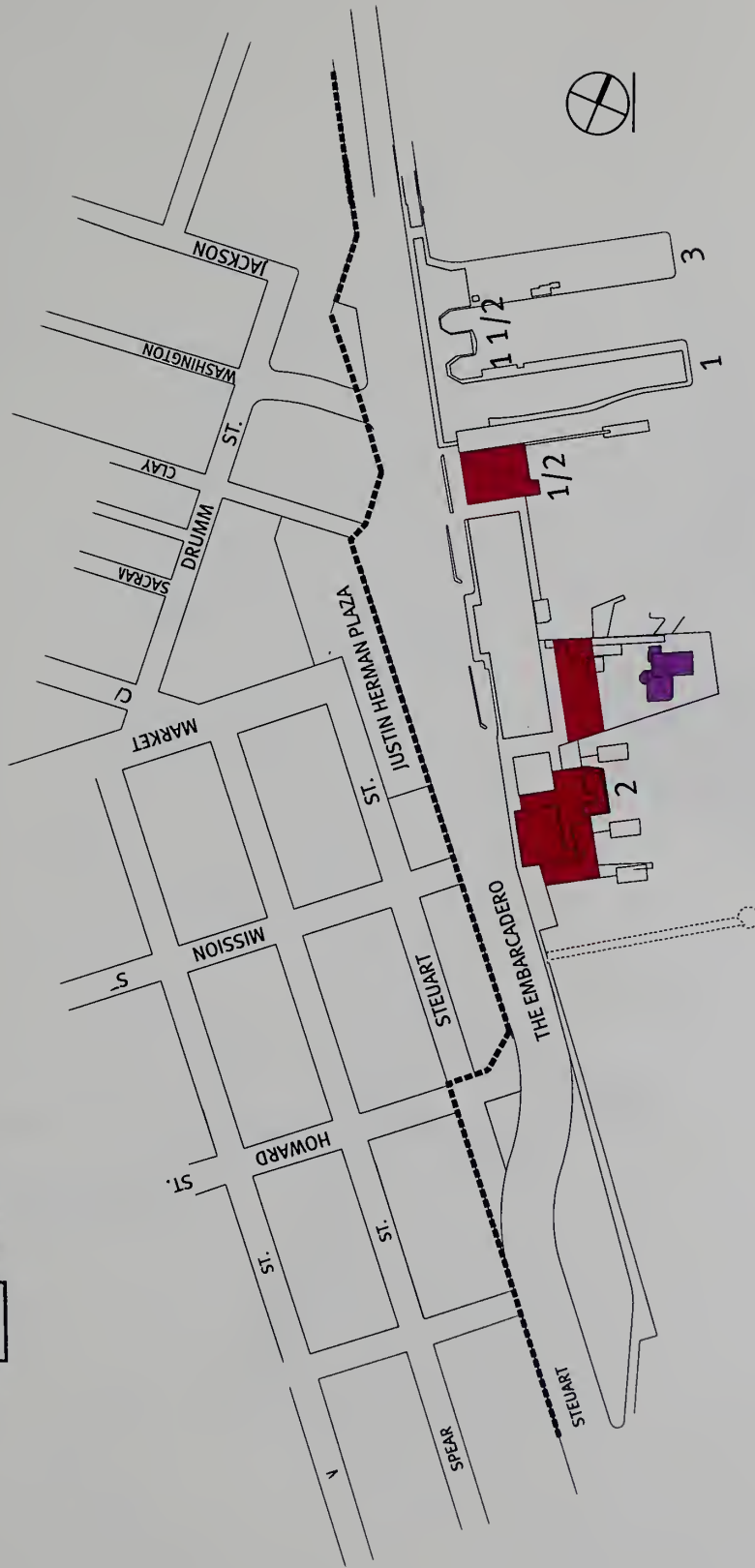
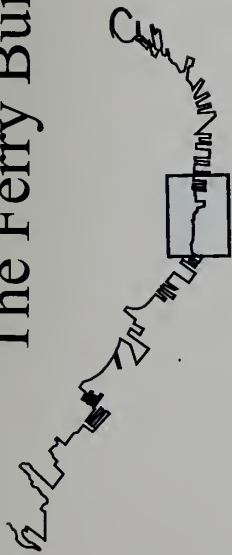


The Northeast Waterfront





The Ferry Building Area



	Tenant Responsibility		Public-Private Development Deal
	Port Operating Budget		Infrastructure Finance District
	Revenue Bonds		No Funding Source

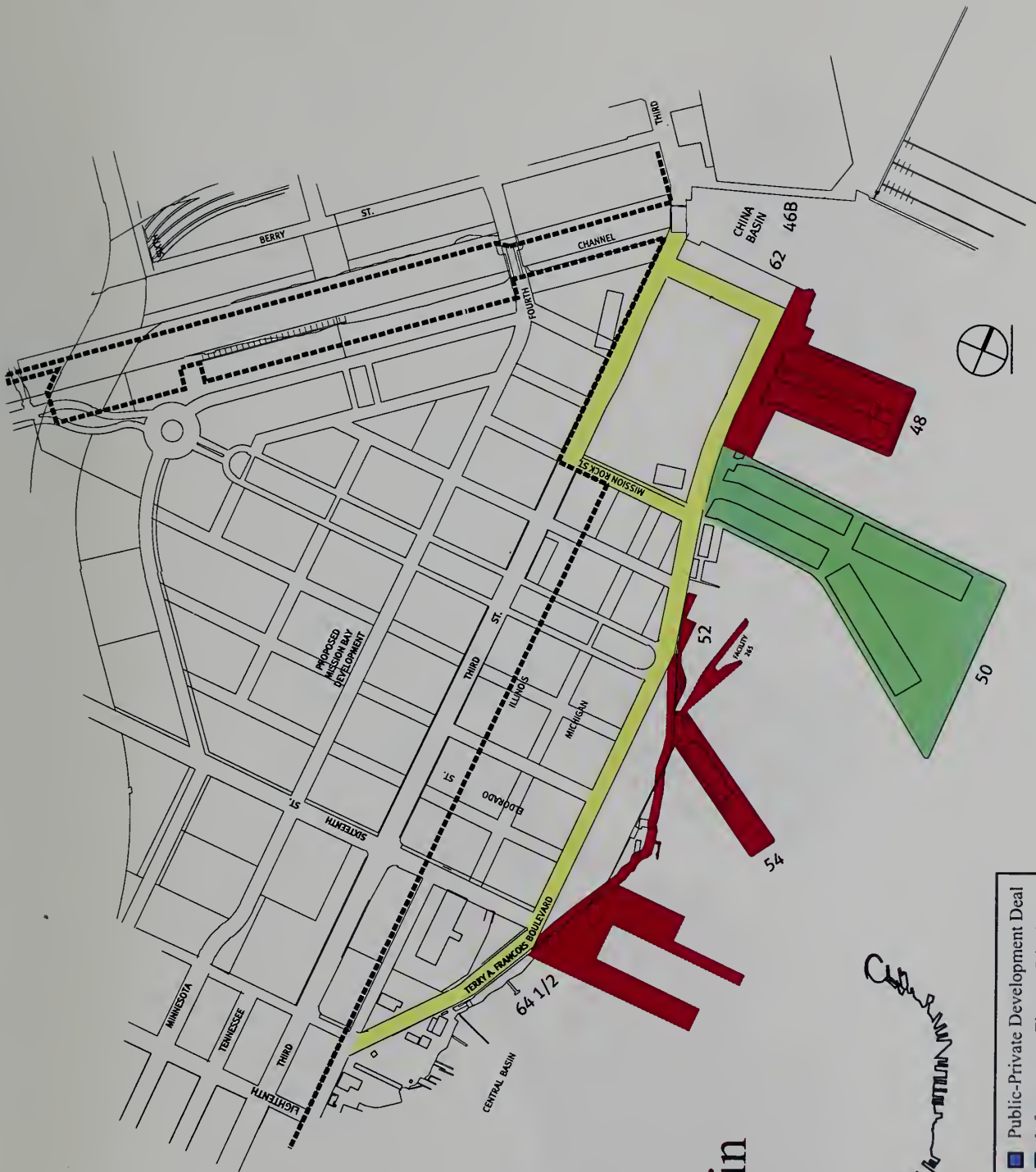


South Beach



- Tenant Responsibility
- Public-Private Development Deal
- Port Operating Budget
- Infrastructure Finance District
- Revenue Bonds
- No Funding Source



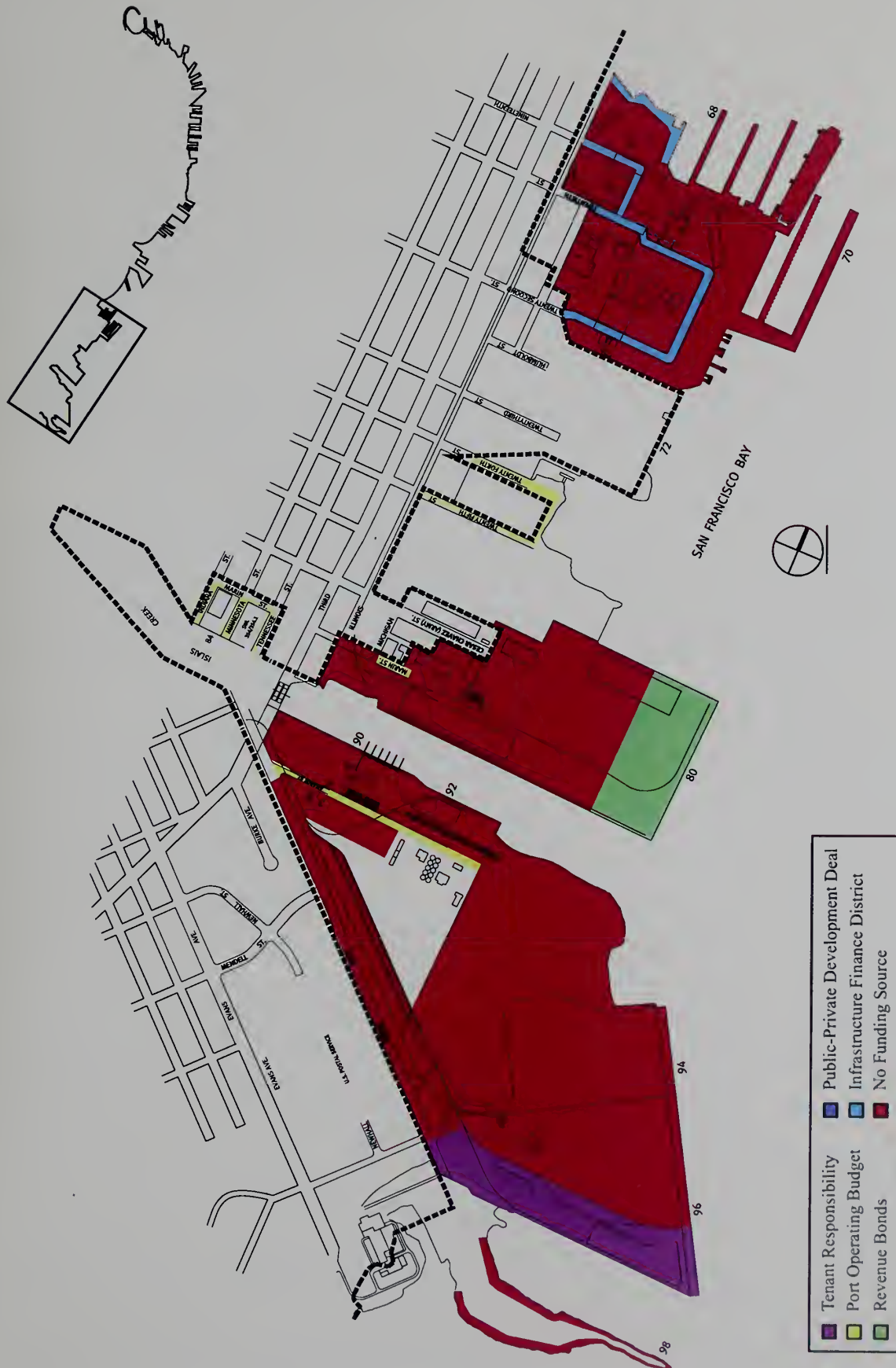


China Basin

	Tenant Responsibility		Public-Private Development Deal
	Port Operating Budget		Infrastructure Finance District
	Revenue Bonds		No Funding Source



The Southern Waterfront





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V. UNFUNDED PROJECTS AND POLICY OPTIONS

The 10-year capital plan includes \$734,276,498 million in unfunded projects. These are projects for which the Port (1) does not expect to have sufficient funds to cover the estimated costs to repair and upgrade the facility, and (2) has not issued an RFP or entered into negotiations with a developer to finance the upgrades. This section of the report identifies those facilities, their overall estimated costs, and identifies options to address the funding shortfalls.

Table V.1: Unfunded Port Projects and Funding Options to Address Unmet Need

Port Facility	Unfunded Cost Estimate	Funding Option
Agriculture Building – Embarcadero at Mission St	\$9,545,000	Development Project and/or Other Public Funding
Downtown Ferry Terminal– Embarcadero at Mission St	25,715,000	Transportation Grant Funding or State Infrastructure Bond
Pier 26 & 26.5 – Embarcadero near Harrison St	45,600,000	Development Project
Pier 28 & 28.5– Embarcadero near Bryant St	28,447,000	None Identified
Pier 30-32 - Embarcadero near Beal St	1,800,000 ¹³	Environmental Air Quality Grant Funding
Pier 33 & 33.5 – Embarcadero near Francisco St	22,273,000	Development Project
Pier 35 – Embarcadero at Bay St	38,372,000	Development Project and/or Public Funding
Pier 38 - Embarcadero at Delancey St	40,625,000	None Identified

¹³ This portion of Pier 30-32 costs relates to a desire to implement shoreside power at the Port's new cruise terminal. It is not a cost funded by the existing development project.

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Pier 43 & 43.5 – Embarcadero between Powell & Mason Sts	10,208,000	Transportation Grant Funding
Pier 45 – Embarcadero between Taylor & Jones Sts	9,602,000	Grant funding and/or other Public Funding
Pier 48 & 48.5 – Terry Francois Blvd south of ATT Ballpark	10,970,000	Development Project
Pier 50 - Terry Francois Blvd south of Pier 48	26,158,000	Balance not funded through revenue bond - None Identified
Pier 54 - Terry Francois Blvd south of Pier 50	33,182,000	None Identified
Pier 52 – Public Boat Ramp	800,000	Grant Funding
Pier 52 – Breakwater	3,000,000	Grant Funding
Pier 70 – Total Complex	233,011,000	Balance not funded bf IFD - Development Project and/or other Public Funding
Pier 80 - balance not funded through revenue bond	61,578,000	Other Public Funding
Pier 90	12,972,000	None Identified
Pier 96	15,377,000	None Identified
Intermodal Transfer Facility	21,310,000	Transportation Grant Funding and/or Other Public Funding
All Other Port Facilities	83,731,498	None Identified
Total Unfunded Projects		\$734,276,498
Total Funding Options that Could be Identified		\$493,784,000
Total Projects with No Identified Options		\$240,492,498

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Discussion and Analysis

As described in the table above, Port staff have identified potential funding options for \$493,784,000 or 67% of the \$734,276,498 in Unfunded Projects. Port staff have not secured any of these funds or development agreements. Rather, these options are for planning purposes. The following is a discussion of the identified options to fund Port projects and the basis for selecting projects for each funding source.

Transportation Grant Funding

Port staff have identified the following four projects that could be funded by transportation grants:

- **Downtown Ferry Terminal Project** including adding new ferry berths for \$25.7 million. This project will most likely be funded by the Regional Measure 2 (RM2) funds approved by the voters in November 2004 and allocated to the Water Transit Authority (WTA) to expand ferry berthing at the Ferry Building.
- **Pier 43 and 43.5 Transportation Enhancements Project** for \$10.2 million. This project will improve access to a new ferry landing, improve transfer between multiple transportation options, and allow access to the fishing industry and visitor businesses. This project includes removing a failing pier and walkway that are public safety hazards, reconstructing a portion of the seawall, and constructing a new pedestrian promenade, a plaza, and multiple transit loading areas.
- **Intermodal Container Transfer Facility Project** including enlargement of rail tunnels 1 and 2 to allow larger containers to be transported through them to Piers 80 and 96, as well as repairing the rail and asphalt at the **Intermodal Container Transfer Facility (ICTF)** freight yard for \$21.3 million.
- **Pier 52 Public Boat Ramp Project** would complete the Port's boat ramp at Pier 52. The Port received a small amount of State Boating and Waterways grant funds for this project. The \$800,000 would fully fund construction of the boat ramp. It is possible that the Port could secure another State or federal grant to fully fund this project.

As noted above, the Downtown Ferry Terminal Extension project is already included in the RM2 Fund expenditure plan. However, Port staff will need to submit grant applications for the Piers 43 and 43.5 Transportation Enhancement Project and the Intermodal Transfer facility project when appropriate funding opportunities arise. For example, the Pier 43 and 43.5 Transportation Enhancement Project would be a good candidate for various federal and State transportation enhancement grant programs. The Intermodal Transfer Facility may be eligible for funding under the proposed State infrastructure bond that is anticipated to be on the June 2006 statewide ballot. It may also be eligible for other State and federal transportation grant programs.

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Other Grant and/or Public Funding

Some of the Port's facilities, such as the Pier 80 cargo terminal and Pier 45 fish processing center, provide a maritime benefit not only to San Francisco but also the State of California by handling and supporting cargo shipments. Unfortunately, revenues generated by these maritime activities barely cover the Port's operating costs and do not cover the infrastructure replacement and enhancement costs required to continue to operate sustainably. The State is considering putting an infrastructure bond on the June 2006 ballot that may include funding to repair, replace and enhance the State's maritime facilities. While still under discussion as of the writing of this report, it is possible that the Port of San Francisco could qualify for funding under the proposed State infrastructure bond. The Port would use these funds to help fund repair and replacement work at the following facilities:

- Pier 45 – Fish Processing Facility at Fisherman's Wharf
- Pier 35 – Cruise Terminal
- Pier 80 – Cargo Facility

Finally, the Piers 30-32 cruise terminal project anticipates requiring shoreside power estimated to cost \$1.8 million to reduce air emissions of the cruise ships while docked at the new cruise terminal. The developer of Piers 30-32 did not include shoreside power in its project scope or financial plan. It may be able to secure grant funds from the Environmental Protection Agency (EPA) or other environmental agencies to cover the \$1.8 million needed for shoreside power equipment.

Development Projects

Port staff have identified the following five Port facilities as good candidates for development projects:

- **Agriculture Building** – The Agriculture Building is the yellow brick building south of the Ferry Building on the Embarcadero Roadway. The current uses include office use and the Amtrak ticket office and reception area. The building needs sub-structure and super-structure repairs and seismic upgrades and interior utility upgrades at an estimated cost of \$9.5 million. The WTA has expressed an interest in 5,000 square feet of office space in the Agriculture Building and the potential for a transportation center on the first floor that would provide transit services for their facilities. Meanwhile, the Port has started a study of the Agriculture Building to more precisely determine the rehabilitation and seismic costs and to identify its potential uses with pro-formas of those uses. We expect to complete that study in Fall 2006 which will help determine whether the Agriculture Building is a potential private/public partnership development project. In addition, the Port will use the study to explore ways in which the RM-2 funds can be leveraged in a development project.

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- **Piers 26 and 26.5** – Piers 26 and 26.5 are located on the Embarcadero Roadway south of the Bay Bridge and are currently being used primarily as warehouse space with some office space. Port staff estimate it will cost a total of \$45.6 million to repair and seismically upgrade the sub-structure and super-structures as well as upgrade interior utilities and aprons. Because of its proximity to the new cruise terminal at Piers 30-32 and new Rincon Hill residential development, Port staff believe this would be a good candidate for a mixed use development project. However, Port staff have not begun the planning process to further evaluate its potential uses to determine whether there would be interest in a private-public partnership.
- **Pier 35** – Located on the Embarcadero Roadway at Bay Street just south of Pier 39, Pier 35 is currently the Port's primary cruise terminal. When the new cruise terminal at Piers 30-32 opens, the Port plans to continue to use Pier 35 to receive cruise ships on days when the new cruise terminal is fully booked. However, Port staff believe Pier 35 could be developed as a mixed use facility that includes a cruise terminal using a private developer and investing public monies for some of the public amenities. Again, Port staff have not begun the planning process to further evaluate its potential uses to determine whether there would be interest in a private-public partnership. Because Pier 35 is a maritime facility, it may be eligible for funding under the proposed State infrastructure bond that is anticipated to go to the voters in June 2006. As noted in *Section IV. Proposed Funding Sources and Uses* of this report, we've identified Pier 35 as a candidate for revenue bond funding if we are unable to secure other public funds and/or a development project to address Pier 35's repair, replacement, and seismic upgrade needs.
- **Piers 48 and 48.5** – Located south of AT&T Ball Park across the 3rd Street bridge, Pier 48 is currently unused. Pier 48 was recently repaired after a fire in the mid 1990s. However, it still requires various repairs such as fender and apron repairs, replacing some of the roof, sub-structure repairs, painting, and repairs to the connecting wharf that total \$10.9 million. Given its proximity to the Ball Park and the Mission Bay development, as well as its relatively good condition, Pier 48 is a good candidate for a private/public partnership development. Port staff have not begun the planning process to further evaluate its potential uses to determine the extent to which there would be interest in a private-public partnership.
- **Pier 70** – The Pier 70 area is a 65-acre site that lies between Mariposa and 22nd Streets off Illinois Street. Long a ship-building and ship-repair site, Pier 70 now houses the most important collection of historic industrial buildings west of the Mississippi but owing to age, type of construction, deterioration, lack of code compliance and absence of site utilities, roads or walkways, most of the buildings on the site are not used and only a few are leased.

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The Capital Plan identifies a total of \$252 million related to the Pier 70 complex including: environmental remediation, construction of streets, sidewalks, street lighting, sewer and water systems, open space development, and historic building preservation. This comprises a portion of the site, principally along 20th Street, which is lined with the site's most beautiful and valuable historic properties, stretching to the waterfront.

The Phase 1 project envisions bringing most, but not all, of the historic buildings and artifacts (fences, cranes) up to current code, repairing or replacing all building utilities and building systems, but not adding any square footage. Work would be done to meet the standards of the U.S. Secretary of the Department of Interior in keeping with the buildings' eligibility for the National Register. Creation of new public open space along the edge from Pier 66 to the SF Drydock leasehold is another element of the project.

As noted in *Section IV Funding Sources and Uses*, Port staff projects to be able to issue \$17.5 million in Infrastructure Financing District tax increment bonds that would be used to fund Pier 70's infrastructure improvements – roads, sidewalks, street lights, and sewer and water systems. Thus, the estimated cost to upgrade the salvageable historic buildings, perform environmental remediation and build the new public open space area on the water's edge is \$233 million. The public open space portion of the project is estimated to cost approximately \$2.66 million. Since the open space portion of the project provides a public recreational amenity, we are assuming it could be funded through a future City General Obligation bond for City parks or a state grant to build a park.

Unfortunately, the Port has sought developers for Pier 70 in the past without success primarily due to the condition of the historic buildings and cost to remediate hazardous materials. The Port is working on completing a viable master plan that includes: 1) a survey of the historic resources and development of preservation options; and 2) an economic and planning feasibility analysis of development options for Pier 70. We expect to complete enough of this master plan in the next 18-months to draft and issue a development RFP for Pier 70 by mid 2007.

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Port Facilities without Identified Funding Options

Port staff have been unable to identify options to fund the repair, replacement and seismic upgrade costs associated with the following Port facilities:

Table V.2: Port Facilities without Identified Funding Options

Port Facility	Unfunded Cost Estimate
Pier 28 & 28.5	\$28,447,000
Pier 38	40,625,000
Pier 50	26,158,000
Pier 54	33,182,000
Pier 90	12,972,000
Pier 96	15,377,000
Other Port Facilities	83,731,498
Total	\$240,492,498

Port staff do not believe Piers 28 and 28.5, 38, 50 and 54 will be optimal candidates for development projects because of the cost to repair and upgrade the facilities. The \$26.2 million cost estimate for Pier 50 covers the sub-structure repairs and seismic upgrades in the non-valley areas that aren't covered by the revenue bond.

If a public Request for Proposals to redevelop these piers with mixed uses (pursuant to the Waterfront Land Use Plan) yields no viable responses, the Port may use Piers 28 and 28.5, 38, and 54 through their useful life and then decide to abandon or demolish them rather than repair them given the costs of repairs. Port staff do not entertain this notion lightly: three of these piers are contributing resources within the proposed Embarcadero National Historic District. Optimally, the range and extent of interim uses within these facilities could be expanded to increase revenue during the remainder of their useful life. However, this would likely not be consistent with public trust law regarding interim uses of facilities that are not "reserved" for potential future maritime use.

The Port will try to make repairs to Piers 90 and 96 to continue to use them since the overall repair costs aren't prohibitive and the facilities provide a useful function for the City including providing space for concrete companies and construction companies as well as Norcal's recycling facility. To do so will require the Port either to forgo funding of repairs to other higher priority Port facilities or generate operating revenues greater than the \$11.9 million net operating revenue goal set out in this 10-year capital plan to cover the annual capital budget and to repay future revenue bonds. We are not, at this time, comfortable assuming that net annual operating revenues greater than \$11.9 million will be available for additional capital projects. However, it is possible (although not probable) that future capital plan updates may reflect more favorable projections of available Port operating revenues for capital projects.

<p style="text-align: center;">PORT OF SAN FRANCISCO 10-YEAR CAPITAL PLAN DRAFT – FOR DISCUSSIONS PURPOSES ONLY</p>

The remaining \$83.7 million in unfunded work at Port facilities constitutes miscellaneous repairs that will add to the Port's back-log of deferred maintenance. At this time, the Port does not have a financial plan to cover these repair costs.

In summary, there is a total of \$734,276,498 in unfunded projects in the 10-year Capital Plan. Of that amount, Port staff have been able to identify a total of \$493,784,000 potential funding sources and a total of \$241,112,498 for which it has been unable to identify funding sources as follows:

Development Projects	\$359,771,000
Grants & Other Public Funding	134,013,000
<u>No Funding Identified</u>	<u>241,112,498</u>
 Total Unfunded Projects	 \$734,276,498

VI. CONCLUSIONS

The Port of San Francisco faces significant challenges in the years ahead to address the enormous back-log of deferred maintenance. As described in this 10-year capital plan, the Port has identified \$1.1 billion of repair, replacement and seismic upgrades required for the continued use of its facilities. The 10-year capital plan identifies \$410.7 million as funded through the Port's tenants, development projects, the Port's annual budget, revenue bonds, and an infrastructure financing district.

While this capital plan also identifies policy options that the Port can pursue to fund a portion of the remaining \$734.3 million in unfunded projects, the Port has not secured any of those options. Each new funding option will require substantial staff time to develop and implement as well as support from the City's policy makers and, in the case of potential development projects, the support of the State Lands Commission and BCDC. In the Port's recent experience, these hurdles can be daunting, but not impossible.

We are hopeful that the some of the Port of San Francisco's maritime facilities will be eligible for funding in the State's proposed infrastructure bond. However, it is quite possible that the bond will only cover infrastructure costs of major cargo ports such as Los Angeles, Long Beach and Oakland.

In short, the Port will be faced with the possibility of closing up to six piers that have the largest unfundable needs (Piers 28, 38, 50, 54, 90 and 96) in the future if it fails to secure public funding and/or development projects to repair and replace the deteriorated infrastructure. The Port is also close to losing the historic buildings at Pier 70 due to their frail condition.

Port facilities survived the 1989 Loma Prieta earthquake (centered in the Santa Cruz mountains) with moderate damage. Pier 45 was significantly damaged and subsequently rehabilitated as a modern fish processing facility. A strong, localized quake could have devastating public safety and economic consequences for San Francisco and its waterfront. The City needs its waterfront to be accessible and operable in the aftermath of such a disaster. Preserving waterfront accessibility and operability should rank high on everyone's priority list.

Implementation of the Port's capital plan will require more than just identifying \$734.3 million to fulfill its capital funding shortfall. It will also require a massive change of perspective from policymakers, regulators, tenants, neighbors, and most of all, from its owners, the general public.

Policymakers will need to prioritize capital funding for Port "enterprise" facilities along with other pressing public needs funded by the City's General Fund. The Port will also have to continuously ensure that it receives the highest fair market value of each of its leases.

The public, the rightful owners of this stretch of waterfront, faces the biggest challenge.

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Forty years ago the State of California transferred Port lands to City administration in the wake of what were considered inappropriate waterfront development proposals. Some of these schemes involved so much bay fill, privatizing of public lands, and obscuring of bay views that they literally spawned modern bay fill regulation, helped form local environmental groups that remain active today, and forced adoption of forty foot height limits that govern much of the waterfront today. The Port is mindful of this history.

The capital plan is an extension of the Port's public mission, which includes:

- Economic use of the waterfront, through activities such as fishing, cruise-based tourism, ship repair and regional public transit via ferry;
- Public enjoyment of the waterfront through construction and maintenance of parks and the waterfront promenade, places to dine and shop, cultural destinations and waterfront recreational access points;
- Restoration of contaminated, bay-fronting industrial brownfields, mainly through redevelopment; and
- Preservation of the Port's historic maritime resources, also via redevelopment.

If the Port is to succeed in this mission, the public must assist it in doing so. We sincerely hope that all interested parties come forward to help the Port undertake this challenge. Great waterfront cities have a dynamic relationship with their waterfronts. San Francisco is and must continue to be a great waterfront city, not just a great city.

Appendix A - Capital Projects

ID#	Project Name	Estimated Cost	Project Type
Downtown Ferry Terminal			
586	Access ramp safety gates	\$75,000	Code Compliance
590	CCTV monitoring	\$75,000	Capital Enhancement
584	Dry dock floats - Downtown Ferry Terminal (2)	\$275,000	Deferred Maintenance Repair/Replace
587	DTFT - Resurface deck and all ramp skid coatings x2	\$150,000	Deferred Maintenance Repair/Replace
1368	DTFT Extension	\$25,000,000	Capital Enhancement
585	Modify 12 existing Ferry Terminal Ramps (Gate B&E) to correct unsafe condition.	\$60,000	Code Compliance
589	Replace canopies (2)	\$80,000	Deferred Maintenance Repair/Replace
Estimated Total - Downtown Ferry Terminal:		\$25,715,000	
Pier 1/2			
444	Pier 1/2 - (Alternative to reconfiguration)	\$281,000	Deferred Maintenance Repair/Replace
1362	Pier 1/2 - Demolition (75% of pier)	\$260,000	Deferred Maintenance Repair/Replace
25	Pier 1/2 - Reconfiguration (remaining 25% after demo)	\$1,407,000	Capital Enhancement
Estimated Total - Pier 1/2:		\$1,948,000	
Pier 2			
1759	Pier 2 - Partial Demolition	\$365,000	Deferred Maintenance Repair/Replace
26	Pier 2 - Substructure - R/R	\$2,372,000	Deferred Maintenance Repair/Replace
159	Pier 2 - Substructure - Seismic	\$1,468,000	Code Compliance
Estimated Total - Pier 2:		\$4,205,000	
Pier 9			
144	Pier 9 - Bulkhead/Shed Building - Interior utilities	\$651,000	Deferred Maintenance Repair/Replace
486	Pier 9 - Bulkhead/Shed Building - Superstructure - Seismic	\$2,513,000	Code Compliance
441	Pier 9 - North Apron-Substructure - R/R	\$1,759,000	Deferred Maintenance Repair/Replace
1200	Pier 9 - Painting Bulkhead and Shed	\$435,000	Deferred Maintenance Repair/Replace
442	Pier 9 - South Apron- Substructure - R/R	\$497,000	Deferred Maintenance Repair/Replace
1022	Pier 9 - Substructure - R/R	\$4,792,000	Deferred Maintenance Repair/Replace
1512	Pier 9 - Substructure - Seismic	\$7,037,000	Code Compliance
Estimated Total - Pier 9:		\$17,684,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 9 1/2			
1513	Pier 9 1/2 - Substructure - R/R	\$555,000	Deferred Maintenance Repair/Replace
1391	Pier 9 1/2 - Substructure - Seismic	\$456,000	Code Compliance
Estimated Total - Pier 9 1/2:		\$1,011,000	
Pier 15			
148	Pier 15 - Bulkhead/Shed Building - Interior utilities	\$435,000	Deferred Maintenance Repair/Replace
490	Pier 15 - Bulkhead/Shed Building - Superstructure - R/R	\$543,000	Code Compliance
1515	Pier 15 - Bulkhead/Shed Building - Superstructure - Seismic	\$2,724,000	Code Compliance
800	Pier 15 - Painting Bulkhead and Shed	\$447,000	Deferred Maintenance Repair/Replace
439	Pier 15 - Substructure - R/R	\$11,794,000	Code Compliance
1514	Pier 15 - Substructure - Seismic	\$11,028,000	Code Compliance
Estimated Total - Pier 15:		\$26,971,000	
Pier 15/17 Valley			
326	Pier 15/17 valley - Demolition	\$6,333,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 15/17 Valley:		\$6,333,000	
Pier 17			
799	Pier 17 - Painting Bulkhead and Shed	\$451,000	Deferred Maintenance Repair/Replace
1741	Pier 17 - Roof Replacement - North Side	\$543,000	Deferred Maintenance Repair/Replace
1151	Pier 17 - Roof Replacement - South Side	\$820,000	Deferred Maintenance Repair/Replace
146	Pier 17 - Shed Building - Interior utilities	\$1,465,000	Deferred Maintenance Repair/Replace
488	Pier 17 - Shed Building - Superstructure - R/R	\$3,641,000	Code Compliance
1516	Pier 17 - Shed Building - Superstructure - Seismic	\$2,285,000	Code Compliance
437	Pier 17 - Substructure - R/R	\$4,613,000	Deferred Maintenance Repair/Replace
1517	Pier 17 - Substructure - Seismic	\$7,550,000	Code Compliance
Estimated Total - Pier 17:		\$21,368,000	
Pier 17 1/2			
435	Pier 17 1/2 - Substructure - R/R	\$1,031,000	Deferred Maintenance Repair/Replace
1518	Pier 17 1/2 - Substructure - Seismic	\$339,000	Code Compliance
Estimated Total - Pier 17 1/2:		\$1,370,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 19			
798	Pier 19 - Painting Bulkhead and Shed	\$430,000	Deferred Maintenance Repair/Replace
1152	Pier 19 - Roof Replacement	\$1,467,000	Deferred Maintenance Repair/Replace
1833	Pier 19 - Shed - Interior Utilities	\$945,000	Deferred Maintenance Repair/Replace
1831	Pier 19 - Shed - Superstructure - R/R	\$381,000	Deferred Maintenance Repair/Replace
1832	Pier 19 - Shed - Superstructure - Seismic	\$1,915,000	Deferred Maintenance Repair/Replace
434	Pier 19 - Substructure - R/R	\$1,629,000	Deferred Maintenance Repair/Replace
1519	Pier 19 - Substructure - Seismic	\$6,784,000	Code Compliance
433	Pier 19 North Apron - Substructure - R/R	\$2,632,000	Deferred Maintenance Repair/Replace
1735	Pier 19 South Apron - Substructure - R/R	\$1,457,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 19:		\$17,640,000	

Pier 19/23 Bulkhead			
432	Pier 19 1/2 - Substructure - R/R	\$3,697,000	Deferred Maintenance Repair/Replace
1521	Pier 19 1/2 - Substructure - Seismic	\$2,026,000	Code Compliance
143	Pier 19 1/2 Bulkhead - Interior utilities	\$477,000	Deferred Maintenance Repair/Replace
485	Pier 19 1/2 Bulkhead - Superstructure - R/R	\$171,000	Deferred Maintenance Repair/Replace
1520	Pier 19 1/2 Bulkhead - Superstructure - Seismic	\$857,000	Code Compliance
Estimated Total - Pier 19/23 Bulkhead:		\$7,228,000	

Pier 22 1/2			
1834	Pier 22 1/2 - Shed - Superstructure - R/R	\$73,000	Deferred Maintenance Repair/Replace
1835	Pier 22 1/2 - Shed - Superstructure - Seismic	\$37,000	Deferred Maintenance Repair/Replace
1029	Pier 22 1/2 - Substructure - R/R	\$1,442,000	Deferred Maintenance Repair/Replace
340	Pier 22 1/2 - Substructure - Seismic	\$714,000	Code Compliance
160	Pier 22 1/2 Fire Station - Interior utilities	\$111,000	Deferred Maintenance Repair/Replace
494	Pier 22 1/2 Fire Station - Superstructure - R/R	\$193,000	Deferred Maintenance Repair/Replace
1523	Pier 22 1/2 Fire Station - Superstructure - Seismic	\$97,000	Code Compliance
Estimated Total - Pier 22 1/2:		\$2,667,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 23			
142	Pier 23 - Bulkhead/Shed Building - Interior utilities	\$1,026,000	Deferred Maintenance Repair/Replace
1525	Pier 23 - Bulkhead/Shed Building - Superstructure - R/R	\$782,000	Deferred Maintenance Repair/Replace
484	Pier 23 - Bulkhead/Shed Building - Superstructure - Seismic	\$1,964,000	Code Compliance
797	Pier 23 - Painting Bulkhead and Shed	\$435,000	Deferred Maintenance Repair/Replace
1153	Pier 23 - Roof Replacement	\$1,426,000	Deferred Maintenance Repair/Replace
909	Pier 23 - Substructure - R/R	\$4,393,000	Deferred Maintenance Repair/Replace
431	Pier 23 - Substructure - Seismic	\$7,222,000	Code Compliance
Estimated Total - Pier 23:		\$17,248,000	
Pier 23 1/2			
141	Pier 23 1/2 - Pier 23 Café - Interior utilities	\$24,000	Deferred Maintenance Repair/Replace
1528	Pier 23 1/2 - Pier 23 Café - Superstructure - R/R	\$40,000	Deferred Maintenance Repair/Replace
1527	Pier 23 1/2 - Pier 23 Café - Superstructure - Seismic	\$51,000	Code Compliance
430	Pier 23 1/2 - Substructure - R/R	\$2,039,000	Deferred Maintenance Repair/Replace
1526	Pier 23 1/2 - Substructure - Seismic	\$335,000	Code Compliance
Estimated Total - Pier 23 1/2:		\$2,489,000	
Pier 24			
1847	Pier 24 - Removal of Concrete Abutement	\$700,000	Code Compliance
1836	Pier 24 - Substructure - R/R (remnant is SFFD Berthing Pier)	\$700,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 24:		\$1,400,000	
Pier 24 1/2			
495	Pier 24 1/2 - Bulkhead Building - Superstructure - R/R	\$1,089,000	Deferred Maintenance Repair/Replace
161	Pier 24 1/2 - Bulkhead Building - Interior utilities	\$650,000	Deferred Maintenance Repair/Replace
30	Pier 24 1/2 - Substructure - R/R	\$2,131,000	Deferred Maintenance Repair/Replace
1247	Pier 24 1/2 - Substructure - Seismic	\$1,759,000	Code Compliance
1306	Pier 24 1/2 - Superstructure - Seismic	\$547,000	Code Compliance
Estimated Total - Pier 24 1/2:		\$6,176,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 26			
163	Pier 26 - Bulkhead/Shed Building - Interior utilities	\$1,292,000	Deferred Maintenance Repair/Replace
920	Pier 26 - North Apron Repair	\$125,000	Deferred Maintenance Repair/Replace
1823	Pier 26 - Shed only - Painting	\$349,000	Deferred Maintenance Repair/Replace
31	Pier 26 - Substructure - R/R	\$10,605,000	Deferred Maintenance Repair/Replace
1531	Pier 26 - Substructure - Seismic	\$24,278,000	Code Compliance
1530	Pier 26 - Superstructure - Seismic	\$2,516,000	Code Compliance
922	Pier 26 and Pier 24 Annex Painting Project	\$107,000	Deferred Maintenance Repair/Replace
921	Pier 26 Annex & Pier 28 West Bulkhead Painting Project	\$104,000	Deferred Maintenance Repair/Replace
1182	Pier 26/28 - Sewer Main Replacement	\$200,000	Deferred Maintenance Repair/Replace
917	Replace Water Main at Pier 26 (CPO709 04/05 Capital Budget)	\$216,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 26:		\$39,792,000	
Pier 26 1/2			
164	Pier 26 1/2 - Bulkhead Building - Interior utilities	\$327,000	Deferred Maintenance Repair/Replace
32	Pier 26 1/2 - Substructure - R/R	\$2,067,000	Deferred Maintenance Repair/Replace
1249	Pier 26 1/2 - Substructure - Seismic	\$1,706,000	Code Compliance
449	Pier 26 1/2 - Superstructure - R/R	\$743,000	Deferred Maintenance Repair/Replace
1308	Pier 26 1/2 - Superstructure - Seismic	\$533,000	Code Compliance
1756	Pier 26/28 - Bulkhead Roofing	\$432,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 26 1/2:		\$5,808,000	
Pier 27			
581	Fender repair	\$1,000,000	Capital Enhancement
646	Northeast Wharf Plaza	\$10,000,000	Capital Enhancement
796	Pier 27 - Painting Bulkhead and Shed	\$529,000	Deferred Maintenance Repair/Replace
137	Pier 27 - Shed Building - Interior utilities	\$501,000	Deferred Maintenance Repair/Replace
1542	Pier 27 - Shed Building - Partial Demo (Front Half)	\$2,332,000	Deferred Maintenance Repair/Replace
1535	Pier 27 - Shed Building - Superstructure - R/R	\$793,000	Deferred Maintenance Repair/Replace
480	Pier 27 - Shed Building - Superstructure - Seismic	\$1,990,000	Code Compliance
429	Pier 27 - Substructure - R/R	\$2,781,000	Deferred Maintenance Repair/Replace
582	Stringer lighting and controls	\$65,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 27:		\$19,991,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 28			
165	Pier 28 - Bulkhead/Shed Building - Interior utilities	\$991,000	Deferred Maintenance Repair/Replace
498	Pier 28 - Bulkhead/Shed Building - Superstructure - Seismic	\$1,506,000	Code Compliance
925	Pier 28 - Bulkhead/Shed Building - Superstructure- R/R	\$300,000	Deferred Maintenance Repair/Replace
1155	Pier 28 - Roof Replacement	\$1,066,000	Deferred Maintenance Repair/Replace
1824	Pier 28 - Shed only - Painting	\$301,000	Deferred Maintenance Repair/Replace
1726	Pier 28 - Substructure - North Apron - R/R	\$805,000	Deferred Maintenance Repair/Replace
450	Pier 28 - Substructure - R/R	\$2,632,000	Deferred Maintenance Repair/Replace
1849	Pier 28 - Substructure - Seismic	\$16,263,000	Deferred Maintenance Repair/Replace
1725	Pier 28 - Substructure - South Apron - R/R	\$3,454,000	Deferred Maintenance Repair/Replace
784	Pier 28 - Water Main Replacement CPO735-01 04/05 Capital Budget	\$284,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 28:		\$27,602,000	
Pier 28 1/2			
166	Pier 28 1/2 - Hivive Restaurant - Interior utilities	\$92,000	Deferred Maintenance Repair/Replace
451	Pier 28 1/2 - Hivive restaurant - Substructure - R/R	\$470,000	Deferred Maintenance Repair/Replace
499	Pier 28 1/2 - Hivive Restaurant - Substructure - Seismic	\$257,000	Code Compliance
1543	Pier 28 1/2 - Hivive Restaurant - Superstructure - Seismic	\$26,000	Code Compliance
Estimated Total - Pier 28 1/2:		\$845,000	
Pier 29			
136	Pier 29 - Bulkhead/Shed Building - Interior utilities	\$1,871,000	Deferred Maintenance Repair/Replace
1156	Pier 29 - Bulkhead/Shed Building - Roofing	\$1,912,000	Deferred Maintenance Repair/Replace
1545	Pier 29 - Bulkhead/Shed Building - Superstructure - R/R	\$4,228,000	Deferred Maintenance Repair/Replace
479	Pier 29 - Bulkhead/Shed Building - Superstructure - Seismic	\$3,033,000	Code Compliance
795	Pier 29 - Painting Bulkhead and Shed	\$527,000	Deferred Maintenance Repair/Replace
1548	Pier 29 - Substructure - R/R	\$3,006,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 29:		\$14,577,000	
Pier 29 1/2			
135	Pier 29 1/2 - Bulkhead Building - Interior utilities	\$580,000	Deferred Maintenance Repair/Replace
1549	Pier 29 1/2 - Bulkhead Building - Superstructure - Seismic	\$1,028,000	Code Compliance
478	Pier 29 1/2 - Bulkhead Building- Superstructure - R/R	\$1,229,000	Deferred Maintenance Repair/Replace
428	Pier 29 1/2 - Substructure - R/R	\$2,758,000	Deferred Maintenance Repair/Replace
1551	Pier 29 1/2 - Substructure - Seismic	\$2,332,000	Code Compliance
Estimated Total - Pier 29 1/2:		\$7,927,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 31			
134	Pier 31 - Bulkhead/Shed Building - Interior utilities	\$919,000	Deferred Maintenance Repair/Replace
477	Pier 31 - Bulkhead/Shed Building - Superstructure - Seismic	\$1,861,000	Code Compliance
794	Pier 31 - Painting Bulkhead and Shed	\$449,000	Deferred Maintenance Repair/Replace
1157	Pier 31 - Roof Replacement	\$1,698,000	Deferred Maintenance Repair/Replace
427	Pier 31 - Substructure - R/R	\$6,678,000	Deferred Maintenance Repair/Replace
1553	Pier 31 - Substructure - Seismic	\$6,997,000	Code Compliance
1552	Pier 31 - Superstructure - R/R	\$1,112,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 31:		\$19,714,000	
Pier 31 1/2			
426	Pier 31 1/2 - Substructure - R/R	\$2,548,000	Deferred Maintenance Repair/Replace
1554	Pier 31 1/2 - Substructure - Seismic	\$2,094,000	Code Compliance
Estimated Total - Pier 31 1/2:		\$4,642,000	
Pier 32			
594	Area lighting	\$100,000	Capital Enhancement
597	Event tents (2)	\$250,000	Capital Enhancement
1908	Pier 30-32 - Substructure R/R	\$18,961,000	Deferred Maintenance Repair/Replace
1911	Pier 30-32 - Substructure Seismic	\$43,032,000	Deferred Maintenance Repair/Replace
591	Pier 32 - Fender repair	\$630,000	Deferred Maintenance Repair/Replace
592	Provide potable water - ships water on face	\$75,000	Deferred Maintenance Repair/Replace
1178	Repalce Foam Fenders pier 30/32	\$192,000	Deferred Maintenance Repair/Replace
593	Shoreside Power	\$1,800,000	Capital Enhancement
596	Traffic barriers	\$116,000	Capital Enhancement
Estimated Total - Pier 32:		\$65,156,000	
Pier 32 1/2			
1558	Wharf 32- 36 demo - Brannon St. Wharf	\$3,500,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 32 1/2:		\$3,500,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 33			
1192	Pier 33 - Painting Bulkhead and Shed	\$515,000	Deferred Maintenance Repair/Replace
125	Pier 33 - Shed Building - Interior utilities	\$1,767,000	Deferred Maintenance Repair/Replace
475	Pier 33 - Shed Building - Superstructure Seismic	\$1,741,000	Code Compliance
1564	Pier 33 - Shed Building - Superstructure R/R	\$5,201,000	Deferred Maintenance Repair/Replace
1361	Pier 33 - Street Parking Pocket	\$100,000	Capital Enhancement
425	Pier 33 - Substructure - R/R	\$4,521,000	Deferred Maintenance Repair/Replace
1566	Pier 33 - Substructure - Seismic	\$7,433,000	Code Compliance
Estimated Total - Pier 33:		\$21,278,000	
Pier 33 1/2			
264	Pier 33 1/2 - (Butterfly Restaurant-North Bulkhead Building) - Interior utilities	\$346,000	Deferred Maintenance Repair/Replace
1567	Pier 33 1/2 - (Butterfly Restaurant-North Bulkhead Building) - Substructure Seismic	\$328,000	Code Compliance
474	Pier 33 1/2 - (Butterfly Restaurant-North Bulkhead Building) - Superstructure - Seismic	\$321,000	Code Compliance
Estimated Total - Pier 33 1/2:		\$995,000	
Pier 35 Cruise Terminal			
573	Face/corner fender repair	\$140,000	Deferred Maintenance Repair/Replace
570	North berth fender repair	\$1,800,000	Deferred Maintenance Repair/Replace
1216	Pier 35 - Bulkhead and Shed - Painting	\$593,000	Deferred Maintenance Repair/Replace
123	Pier 35 - Bulkhead/Shed Building - Interior utilities	\$4,064,000	Deferred Maintenance Repair/Replace
473	Pier 35 - Bulkhead/Shed Building - Superstructure - Seismic	\$3,320,000	Code Compliance
1569	Pier 35 - Bulkhead/Shed Building - Superstructure R/R	\$5,290,000	Deferred Maintenance Repair/Replace
1159	Pier 35 - Roof Replacement	\$65,000	Deferred Maintenance Repair/Replace
423	Pier 35 - Substructure - R/R	\$10,421,000	Deferred Maintenance Repair/Replace
422	Pier 35 - Substructure - Seismic	\$11,422,000	Code Compliance
577	Public Restroom	\$175,000	Code Compliance
578	Relocate electric transformer to the rear of Pier 35	\$250,000	Capital Enhancement
580	ships sewage connection	\$400,000	Code Compliance
579	Ships' water - increase capacity	\$432,000	Capital Enhancement
Estimated Total - Pier 35 Cruise Terminal:		\$38,372,000	
Pier 35 1/2			
1570	Marginal Wharfbtw Pier 39 & Pier 35 - Substructure	\$3,590,000	Code Compliance
Estimated Total - Pier 35 1/2:		\$3,590,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 36 1/2 (Marginal Wharf)			
1394	Demolition of marginal wharf	\$100,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 36 1/2 (Marginal Wharf):		\$100,000	
Pier 38			
877	Pier 38 - Apron Repair	\$360,000	Deferred Maintenance Repair/Replace
1800	Pier 38 - Bulkhead and Shed - Painting	\$483,000	Deferred Maintenance Repair/Replace
169	Pier 38 - Bulkhead/Shed Building - Interior utilities	\$1,448,000	Deferred Maintenance Repair/Replace
1559	Pier 38 - Bulkhead/Shed Building - Superstructure - R/R	\$1,298,000	Deferred Maintenance Repair/Replace
1560	Pier 38 - Bulkhead/Shed Building - Superstructure - Seismic	\$2,172,000	Code Compliance
1728	Pier 38 - Substructure - North Apron - R/R	\$4,287,000	Deferred Maintenance Repair/Replace
926	Pier 38 - Substructure - R/R	\$16,596,000	Deferred Maintenance Repair/Replace
454	Pier 38 - Substructure - Seismic	\$11,252,000	Code Compliance
1729	Pier 38 - Substructure - South Apron - R/R	\$2,729,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 38:		\$40,625,000	
Pier 38 1/2			
1563	Pier 38 1/2 - Interior utilities	\$116,000	Deferred Maintenance Repair/Replace
455	Pier 38 1/2 - Substructure - R/R	\$436,000	Deferred Maintenance Repair/Replace
1573	Pier 38 1/2 - Substructure Seismic	\$359,000	Code Compliance
1562	Pier 38 1/2 - Superstructure - R/R	\$103,000	Deferred Maintenance Repair/Replace
1561	Pier 38 1/2 - Superstructure - Seismic	\$129,000	Code Compliance
Estimated Total - Pier 38 1/2:		\$1,143,000	
Pier 39			
306	Pier 39 - Retail Shops - Superstructure - Seismic	\$5,116,000	Code Compliance
Estimated Total - Pier 39:		\$5,116,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 40			
1801	Pier 40 - Bulkhead and Shed - Painting	\$208,000	Deferred Maintenance Repair/Replace
171	Pier 40 - Restaurant - Interior utilities	\$25,000	Deferred Maintenance Repair/Replace
503	Pier 40 - Restaurant - Superstructure - R/R	\$16,000	Deferred Maintenance Repair/Replace
1579	Pier 40 - Restaurant - Superstructure - Seismic	\$27,000	Code Compliance
170	Pier 40 - Shed Building - Interior utilities	\$500,000	Deferred Maintenance Repair/Replace
502	Pier 40 - Shed Building - Superstructure - Seismic	\$900,000	Code Compliance
1578	Pier 40 - Shed Building - Superstructure R/R	\$1,613,000	Deferred Maintenance Repair/Replace
1731	Pier 40 - Substructure - North Apron - R/R	\$288,000	Deferred Maintenance Repair/Replace
36	Pier 40 - Substructure - R/R	\$13,232,000	Deferred Maintenance Repair/Replace
1253	Pier 40 - Substructure - Seismic	\$7,234,000	Code Compliance
1732	Pier 40 - Substructure - South Apron - R/R	\$1,151,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 40:		\$25,194,000	

South Beach Marina

1584	Pier 40 1/2 - (Incl. Java House, S. Marina) - Substructure Seismic	\$344,000	Code Compliance
457	Pier 40 1/2 - (Incl. Java House, S. Marina) - Substructure R/R	\$2,093,000	Code Compliance
172	Pier 40 1/2 - (Java House) - Interior utilities	\$32,000	Deferred Maintenance Repair/Replace
1586	Pier 40 1/2 - (Java House) - Superstructure - R/R	\$39,000	Deferred Maintenance Repair/Replace
1587	Pier 40 1/2 - (Java House) - Superstructure - Seismic	\$20,000	Code Compliance
Estimated Total - South Beach Marina:		\$2,528,000	

Pier 41

1588	Pier 41 - Substructure Seismic	\$2,244,000	Code Compliance
Estimated Total - Pier 41:		\$2,244,000	

Pier 43

412	Pier 43 - (Adj. to Pier 43 1/2 Prkng Lot, Arch) - Substructure - R/R	\$68,000	Deferred Maintenance Repair/Replace
1591	Pier 43 - (Adj. to Pier 43 1/2 Prkng Lot, Arch) - Substructure - Seismic	\$210,000	Code Compliance
Estimated Total - Pier 43:		\$278,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 43 1/2			
644	Interpretive Signage Progra	\$400,000	Capital Enhancement
113	Pier 43 1/2 - Demolition of Tait's/Patio Sandwich Shop	\$15,000	Deferred Maintenance Repair/Replace
1654	Pier 43 1/2 - Public Access	\$3,500,000	Capital Enhancement
640	Pier 43 1/2 - Public Access	\$2,000,000	Capital Enhancement
1596	Pier 43 1/2 - Red & White Tours - Interior utilities	\$9,000	Deferred Maintenance Repair/Replace
1595	Pier 43 1/2 - Red & White Tours - Superstructure - Seismic	\$6,000	Code Compliance
1208	Pier 43 1/2 - removal	\$1,500,000	Deferred Maintenance Repair/Replace
638	Seawall from Pier 43 to Mason Street	\$2,500,000	Deferred Maintenance Repair/Replace

Estimated Total - Pier 43 1/2: \$9,930,000

Pier 45

791	Pier 45 - Painting	\$175,000	Deferred Maintenance Repair/Replace
1604	Pier 45 - Shed A - Superstructure - R/R	\$565,000	Deferred Maintenance Repair/Replace
106	Pier 45 - Shed A and Office - Interior utilities	\$370,000	Deferred Maintenance Repair/Replace
641	Pier 45 - Shed A Plaza	\$400,000	Capital Enhancement
107	Pier 45 - Shed B - Interior utilities	\$352,000	Deferred Maintenance Repair/Replace
1606	Pier 45 - Shed B - Superstructure - R/R	\$1,135,000	Deferred Maintenance Repair/Replace
108	Pier 45 - Shed C - Interior utilities	\$1,612,000	Deferred Maintenance Repair/Replace
1608	Pier 45 - Shed C - Superstructure - R/R	\$1,156,000	Deferred Maintenance Repair/Replace
109	Pier 45 - Shed D - Interior utilities	\$318,000	Deferred Maintenance Repair/Replace
1610	Pier 45 - Shed D - Superstructure - R/R	\$1,026,000	Deferred Maintenance Repair/Replace
899	Pier 45 - Stormwater/Wastewater Improvements	\$840,000	Deferred Maintenance Repair/Replace
407	Pier 45 - Substructure - R/R	\$1,533,000	Deferred Maintenance Repair/Replace

Estimated Total - Pier 45: \$9,482,000

Pier 45 East

367	Storm Sewer Tie-in to City Sewer	\$120,000	Code Compliance
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Estimated Total - Pier 45 East: \$120,000

ID#	Project Name	Estimated Cost	Project Type
China Basin Ferry Terminal			
599	Brow ramp ada modifications	\$96,000	Deferred Maintenance Repair/Replace
1793	CBFT - Resurface deck and all ramp skid coatings x2	\$120,000	Deferred Maintenance Repair/Replace
602	CCTV monitoring	\$75,000	Capital Enhancement
1367	China Basin Breakwater	\$7,000,000	Capital Enhancement
598	Dry dock floats - China Basin Ferry Terminal (2)	\$225,000	Deferred Maintenance Repair/Replace
601	Paint all surfaces	\$150,000	Deferred Maintenance Repair/Replace
Estimated Total - China Basin Ferry Terminal:		\$7,666,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 47			
95	Pier 47 - Guardino's - Interior utilities	\$1,000	Deferred Maintenance Repair/Replace
394	Pier 47 - Guardino's - Superstructure - R/R	\$2,000	Deferred Maintenance Repair/Replace
282	Pier 47 - Guardino's - Superstructure - Seismic	\$10,000	Code Compliance
96	Pier 47 - Guardino's/Storage Building - Interior utilities	\$1,000	Deferred Maintenance Repair/Replace
395	Pier 47 - Guardino's/Storage Building - Superstructure - R/R	\$3,000	Deferred Maintenance Repair/Replace
283	Pier 47 - Guardino's/Storage Building - Superstructure - Seismic	\$15,000	Code Compliance
262	Pier 47 - Scoma's Rest. Parcel 3/Storage Bldg - Interior utilities	\$7,000	Deferred Maintenance Repair/Replace
392	Pier 47 - Scoma's Rest. Parcel 3/Storage Bldg - Superstructure - R/R	\$45,000	Deferred Maintenance Repair/Replace
280	Pier 47 - Scoma's Rest. Parcel 3/Storage Bldg - Superstructure - Seismic	\$23,000	Code Compliance
94	Pier 47 - Scoma's Rest. Parcel 4/Storage Shed - Interior utilities	\$2,000	Deferred Maintenance Repair/Replace
393	Pier 47 - Scoma's Rest. Parcel 4/Storage Shed - Superstructure - R/R	\$10,000	Deferred Maintenance Repair/Replace
281	Pier 47 - Scoma's Rest. Parcel 4/Storage Shed - Superstructure - Seismic	\$5,000	Code Compliance
261	Pier 47 - Scoma's Restaurant-Parcel 1- Interior utilities	\$1,000	Deferred Maintenance Repair/Replace
390	Pier 47 - Scoma's Restaurant-Parcel 1- Superstructure - R/R	\$4,000	Deferred Maintenance Repair/Replace
278	Pier 47 - Scoma's Restaurant-Parcel 1- Superstructure - Seismic	\$5,000	Code Compliance
92	Pier 47 - Scoma's Restaurant-Parcel 2 - Interior utilities	\$189,000	Deferred Maintenance Repair/Replace
391	Pier 47 - Scoma's Restaurant-Parcel 2 - Superstructure - R/R	\$168,000	Deferred Maintenance Repair/Replace
279	Pier 47 - Scoma's Restaurant-Parcel 2 - Superstructure - Seismic	\$210,000	Code Compliance
90	Pier 47 - Scoma's/Fish Prep Build - Interior utilities	\$3,000	Deferred Maintenance Repair/Replace
1615	Pier 47 - Scoma's/Fish Prep Build - Superstructure - R/R	\$8,000	Deferred Maintenance Repair/Replace
1614	Pier 47 - Scoma's/Fish Prep Build - Superstructure - Seismic	\$10,000	Code Compliance
97	Pier 47 - W.F. Alber Seafoods Proc Building - Interior utilities	\$71,000	Deferred Maintenance Repair/Replace
396	Pier 47 - W.F. Alber Seafoods Proc Building - Superstructure - R/R	\$254,000	Deferred Maintenance Repair/Replace
284	Pier 47 - W.F. Alber Seafoods Proc Building - Superstructure - Seismic	\$127,000	Code Compliance
275	Pier 47 - Wharf J-6 - Substructure - R/R	\$65,000	Deferred Maintenance Repair/Replace
386	Pier 47 - Wharf J-6 - Substructure Seismic - bridge to Scoma's	\$160,000	Code Compliance
387	Pier 47 - Wharf J-7 & J-8 - Substructure R/R	\$1,161,000	Deferred Maintenance Repair/Replace
388	Pier 47 - Wharf J-7 & J-8 - Substructure Seismic	\$2,873,000	Code Compliance
Estimated Total - Pier 47:		\$5,433,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 48			
605	Exterior lighting and controls	\$100,000	Capital Enhancement
806	Pier 48 - Interior Painting	\$110,000	Deferred Maintenance Repair/Replace
176	Pier 48 - Shed A - Interior utilities	\$210,000	Deferred Maintenance Repair/Replace
1802	Pier 48 - Shed A - Painting	\$363,000	Deferred Maintenance Repair/Replace
1751	Pier 48 - Shed A - Roofing	\$1,130,000	Deferred Maintenance Repair/Replace
1618	Pier 48 - Shed A - Superstructure - R/R	\$132,000	Deferred Maintenance Repair/Replace
177	Pier 48 - Shed B - Interior utilities	\$204,000	Deferred Maintenance Repair/Replace
1803	Pier 48 - Shed B - Painting	\$373,000	Deferred Maintenance Repair/Replace
1160	Pier 48 - Shed B - Roofing	\$1,130,000	Deferred Maintenance Repair/Replace
604	Pier 48 - Substructure - Fender Repair	\$490,000	Deferred Maintenance Repair/Replace
891	Pier 48 - Substructure - Fender Repair	\$1,377,000	Capital Enhancement
458	Pier 48 - Substructure R/R	\$1,317,000	Deferred Maintenance Repair/Replace
1733	Pier 48 - Substructure R/R - East Face	\$278,000	Deferred Maintenance Repair/Replace
459	Pier 48 - Substructure R/R - North Apron	\$2,156,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 48:		\$9,370,000	

Pier 48 1/2

461	Pier 48 1/2 - Connecting Wharf - Substructure - R/R	\$585,000	Deferred Maintenance Repair/Replace
1623	Pier 48 1/2 - Connecting Wharf - Substructure - Seismic	\$962,000	Code Compliance
178	Pier 48 1/2 - Jelly's Restaurant - Interior utilities	\$22,000	Deferred Maintenance Repair/Replace
1621	Pier 48 1/2 - Jelly's Restaurant - Superstructure - Seismic	\$31,000	Code Compliance
Estimated Total - Pier 48 1/2:		\$1,600,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 49			
103	Pier 49 - Alioto's Restaurant (Wharf J-1) - Interior utilities	\$110,000	Deferred Maintenance Repair/Replace
402	Pier 49 - Alioto's Restaurant (Wharf J-1) - Super - R/R	\$98,000	Deferred Maintenance Repair/Replace
290	Pier 49 - Alioto's Restaurant (Wharf J-1) - Super - Seismic	\$122,000	Code Compliance
104	Pier 49 - Fisherman's Grotto No. 9 (Wharf J-1) - Interior utilities	\$329,000	Deferred Maintenance Repair/Replace
403	Pier 49 - Fisherman's Grotto No. 9 (Wharf J-1) - Super - R/R	\$292,000	Deferred Maintenance Repair/Replace
291	Pier 49 - Fisherman's Grotto No. 9 (Wharf J-1) - Super - Seismic	\$367,000	Code Compliance
105	Pier 49 - Fisherman's Memorial Chapel - Interior utilities	\$20,000	Deferred Maintenance Repair/Replace
292	Pier 49 - Fisherman's Memorial Chapel - Super - Seismic	\$22,000	Code Compliance
99	Pier 49 - Guardino's (Wharf J-1) - Interior utilities	\$32,000	Deferred Maintenance Repair/Replace
980	Pier 49 - Guardino's (Wharf J-1) - Super - R/R	\$28,000	Deferred Maintenance Repair/Replace
286	Pier 49 - Guardino's (Wharf J-1) - Super - Seismic	\$36,000	Code Compliance
102	Pier 49 - Nick's Lighthouse (Wharf J-1) - Interior utilities	\$71,000	Deferred Maintenance Repair/Replace
983	Pier 49 - Nick's Lighthouse (Wharf J-1) - Super - R/R	\$70,000	Deferred Maintenance Repair/Replace
289	Pier 49 - Nick's Lighthouse (Wharf J-1) - Super - Seismic	\$44,000	Code Compliance
101	Pier 49 - Sabella & Latorre (Wharf J-1) - Interior utilities	\$70,000	Deferred Maintenance Repair/Replace
982	Pier 49 - Sabella & Latorre (Wharf J-1) - Super - R/R	\$70,000	Deferred Maintenance Repair/Replace
288	Pier 49 - Sabella & Latorre (Wharf J-1) - Super - Seismic	\$44,000	Code Compliance
98	Pier 49 - Tarantino's Restaurant (Wharf J-1) - Interior utilities	\$125,000	Deferred Maintenance Repair/Replace
979	Pier 49 - Tarantino's Restaurant (Wharf J-1) - Super - R/R	\$111,000	Deferred Maintenance Repair/Replace
285	Pier 49 - Tarantino's Restaurant (Wharf J-1) - Super - Seismic	\$140,000	Code Compliance
100	Pier 49 - The Crab Station (Wharf J-1) - Interior utilities	\$87,000	Deferred Maintenance Repair/Replace
287	Pier 49 - The Crab Station (Wharf J-1) - Super - Seismic	\$54,000	Code Compliance
406	Pump Station - R/R	\$80,000	Deferred Maintenance Repair/Replace
1624	Wharf J-1 - Substructure - Seismic	\$2,236,000	Code Compliance
405	Wharf J-3 - Substructure - R/R	\$176,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 49:		\$4,834,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 50			
1164	Construct Nursery/Greenwaste Facility for Port Gardeners	\$65,000	Capital Enhancement
808	Pier 50 - Emergency Backup Generator	\$200,000	Deferred Maintenance Repair/Replace
181	Pier 50 - Shed A - Interior utilities	\$1,001,000	Deferred Maintenance Repair/Replace
1804	Pier 50 - Shed A - Painting	\$291,000	Deferred Maintenance Repair/Replace
1754	Pier 50 - Shed A - Roofing	\$1,093,000	Deferred Maintenance Repair/Replace
1629	Pier 50 - Shed A - Superstructure - R/R	\$1,159,000	Deferred Maintenance Repair/Replace
1090	Pier 50 - Shed A - Superstructure - Seismic	\$1,455,000	Code Compliance
182	Pier 50 - Shed B - Interior utilities	\$1,032,000	Deferred Maintenance Repair/Replace
1805	Pier 50 - Shed B - Painting	\$293,000	Deferred Maintenance Repair/Replace
1630	Pier 50 - Shed B - Superstructure - R/R	\$1,176,000	Deferred Maintenance Repair/Replace
1091	Pier 50 - Shed B - Superstructure - Seismic	\$1,476,000	Code Compliance
183	Pier 50 - Shed C - Interior utilities	\$1,157,000	Deferred Maintenance Repair/Replace
1806	Pier 50 - Shed C - Painting	\$292,000	Deferred Maintenance Repair/Replace
1631	Pier 50 - Shed C - Superstructure - R/R	\$706,000	Deferred Maintenance Repair/Replace
1092	Pier 50 - Shed C - Superstructure - Seismic	\$1,773,000	Code Compliance
184	Pier 50 - Shed D - Interior utilities	\$573,000	Deferred Maintenance Repair/Replace
1807	Pier 50 - Shed D - Painting	\$328,000	Deferred Maintenance Repair/Replace
1632	Pier 50 - Shed D - Superstructure - R/R	\$1,223,000	Deferred Maintenance Repair/Replace
1093	Pier 50 - Shed D - Superstructure - Seismic	\$2,047,000	Code Compliance
769	Pier 50 - Substructure - Fender Repair	\$220,000	Deferred Maintenance Repair/Replace
464	Pier 50 - Substructure - North Apron - R/R	\$535,000	Deferred Maintenance Repair/Replace
1044	Pier 50 - Substructure - R/R	\$4,464,000	Deferred Maintenance Repair/Replace
1635	Pier 50 - Substructure - Seismic	\$10,250,000	Code Compliance
463	Pier 50 - Substructure (Valley area btwn Sheds A & B) - R/R	\$15,051,000	Deferred Maintenance Repair/Replace
1636	Pier 50 - Substructure (Valley area btwn Sheds A & B) - Seismic	\$3,334,000	Code Compliance

Estimated Total - Pier 50: \$51,194,000

Port Maintenance- Pier 50D

1502	Install overhead crane in welding shop	\$220,000	Capital Enhancement
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Estimated Total - Port Maintenance- Pier 50D: \$220,000

Pier 52

879	Pier 52 - Public Boat Ramp - Shoreline improvements	\$800,000	Deferred Maintenance Repair/Replace
1910	Pier 52 Breakwater	\$3,000,000	Capital Enhancement

Estimated Total - Pier 52: \$3,800,000

ID#	Project Name	Estimated Cost	Project Type
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Pier 54

187	Pier 54 - Office Building - Internal utilities	\$70,000	Deferred Maintenance Repair/Replace
1638	Pier 54 - Office Building - Superstructure - R/R	\$78,000	Deferred Maintenance Repair/Replace
514	Pier 54 - Office Building - Superstructure - Seismic	\$39,000	Code Compliance
186	Pier 54 - Shed Building - Internal utilities	\$594,000	Deferred Maintenance Repair/Replace
1808	Pier 54 - Shed Building - Painting	\$157,000	Deferred Maintenance Repair/Replace
1755	Pier 54 - Shed Building - Roofing	\$1,086,000	Deferred Maintenance Repair/Replace
1639	Pier 54 - Shed Building - Superstructure - R/R	\$958,000	Deferred Maintenance Repair/Replace
513	Pier 54 - Shed Building - Superstructure - Seismic	\$481,000	Code Compliance
188	Pier 54 - Storage Shed - Internal utilities	\$6,000	Deferred Maintenance Repair/Replace
1692	Pier 54 - Storage Shed - Superstructure - R/R	\$1,000	Deferred Maintenance Repair/Replace
515	Pier 54 - Storage Shed - Superstructure - Seismic	\$5,000	Code Compliance
360	Pier 54 - Substructure - R/R	\$23,318,000	Deferred Maintenance Repair/Replace
1047	Pier 54 - Substructure - Seismic	\$6,389,000	Code Compliance
Estimated Total - Pier 54:		\$33,182,000	

Pier 60

1642	Pier 60 Wharf - Substructure - Seismic	\$350,000	Code Compliance
1643	Pier 60 Wharf - Substructure R/R	\$707,000	Deferred Maintenance Repair/Replace
190	Pier 60 Wharf - The Old Carmen's Restaurant - Interior utilities	\$121,000	Deferred Maintenance Repair/Replace
517	Pier 60 Wharf - The Old Carmen's Restaurant - Superstructure R/R	\$7,000	Deferred Maintenance Repair/Replace
1641	Pier 60 Wharf - The Old Carmen's Restaurant - Superstructure Seismic	\$34,000	Code Compliance
Estimated Total - Pier 60:		\$1,219,000	

Pier 64

45	Pier 64 - Demo and Removal	\$2,000,000	Deferred Maintenance Repair/Replace
1693	Pier 64 - New Ferry Dock	\$0	Capital Enhancement
Estimated Total - Pier 64:		\$2,000,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 68			
1858	Pier 70 - Complete Rehab Building #101 - UIW Office/Admin. Bldg	\$25,211,000	Deferred Maintenance Repair/Replace
1859	Pier 70 - Complete Rehab Building #102 - UIW Powerhouse #1	\$1,391,000	Deferred Maintenance Repair/Replace
1860	Pier 70 - Complete Rehab Building #103 - Steam Powerhouse #2	\$373,000	Deferred Maintenance Repair/Replace
1861	Pier 70 - Complete Rehab Building #104 - UIW offices	\$16,865,000	Deferred Maintenance Repair/Replace
1862	Pier 70 - Complete Rehab Building #105 - Forge Shop	\$3,320,000	Deferred Maintenance Repair/Replace
1863	Pier 70 - Complete Rehab Building #108 - Carpentry Shop	\$12,452,000	Deferred Maintenance Repair/Replace
1866	Pier 70 - Complete Rehab Building #110 - Yard Washroom	\$1,014,000	Deferred Maintenance Repair/Replace
1867	Pier 70 - Complete Rehab Building #111 - Main Office	\$13,031,000	Deferred Maintenance Repair/Replace
1870	Pier 70 - Complete Rehab Building #121 - Beth Street Drydocks	\$16,000	Deferred Maintenance Repair/Replace
1871	Pier 70 - Complete Rehab Building #122 - Chockhouse #1	\$131,000	Deferred Maintenance Repair/Replace
1872	Pier 70 - Complete Rehab Building #123 - Checkhouse #2	\$63,000	Deferred Maintenance Repair/Replace
1873	Pier 70 - Complete Rehab Building #127 -	\$736,000	Deferred Maintenance Repair/Replace
1850	Pier 70 - Complete Rehab Building #36 - Welding Shed	\$2,084,000	Deferred Maintenance Repair/Replace
1851	Pier 70 - Complete Rehab Building #38 - Boiler Shop	\$5,040,000	Deferred Maintenance Repair/Replace
1856	Pier 70 - Complete Rehab Building #58 -	\$198,000	Deferred Maintenance Repair/Replace
1857	Pier 70 - Complete Rehab Building #68 -	\$223,000	Deferred Maintenance Repair/Replace
1902	Pier 70 - Complete Rehab East Crane	\$2,056,000	Deferred Maintenance Repair/Replace
1903	Pier 70 - Complete Rehab West Crane	\$3,164,000	Deferred Maintenance Repair/Replace
1864	Pier 70 - Demolition Building #107 - Car Shop	\$80,000	Deferred Maintenance Repair/Replace
1865	Pier 70 - Demolition Building #109 - Plate Shop #1	\$1,777,000	Deferred Maintenance Repair/Replace
1868	Pier 70 - Demolition Building #119 - Yard Washroom	\$29,000	Deferred Maintenance Repair/Replace
1869	Pier 70 - Demolition Building #120 - Pipe Rack	\$34,000	Deferred Maintenance Repair/Replace
1901	Pier 70 - Demolition Building #30	\$101,000	Deferred Maintenance Repair/Replace
1897	Pier 70 - Demolition Building #40 - Employment Office	\$202,000	Deferred Maintenance Repair/Replace
1852	Pier 70 - Demolition Building #49 - Warehouse and Cranes	\$179,000	Deferred Maintenance Repair/Replace
1853	Pier 70 - Demolition Building #50 - Beth Street Substation	\$16,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 68:		\$89,786,000	
Pier 70			
1875	Pier 70 - Complete Rehab Building #64 - Substation 6	\$975,000	Deferred Maintenance Repair/Replace
1906	Pier 70 - Environmental Remediation	\$30,000,000	Deferred Maintenance Repair/Replace
1905	Pier 70 - Open Space	\$2,660,000	Deferred Maintenance Repair/Replace
1904	Pier 70 - Utility Infrastructure, Roadways	\$19,500,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 70:		\$53,135,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 80			
938	501 Cesar Chavez Restroom Renovation	\$600,000	Deferred Maintenance Repair/Replace
621	Berth A fender replace	\$350,000	Deferred Maintenance Repair/Replace
622	Berth B fender replace	\$245,000	Deferred Maintenance Repair/Replace
623	Berth C fender replace	\$910,000	Deferred Maintenance Repair/Replace
624	Berth D fender replace	\$700,000	Deferred Maintenance Repair/Replace
767	Lower existing 20 doors at Pier 80A to correct unfavorable conditon.	\$285,000	Deferred Maintenance Repair/Replace
626	Perimeter security fence upgrade	\$455,000	Capital Enhancement
1345	Pier 80 - (also 92 & 96) - Existing Rail - R/R	\$167,000	Deferred Maintenance Repair/Replace
1812	Pier 80 - Building #103 - Painting	\$119,000	Deferred Maintenance Repair/Replace
234	Pier 80 - Entry Canopy - interior utilities	\$27,000	Deferred Maintenance Repair/Replace
1126	Pier 80 - Entry Canopy - Super - R/R	\$429,000	Deferred Maintenance Repair/Replace
936	Pier 80 - Gate Improvements - Phase II	\$325,000	Deferred Maintenance Repair/Replace
236	Pier 80 - Gear & Maintenance Building - Interior utilities	\$470,000	Deferred Maintenance Repair/Replace
1811	Pier 80 - Gear & Maintenance Building - Painting	\$168,000	Deferred Maintenance Repair/Replace
1128	Pier 80 - Gear & Maintenance Building - Super - R/R	\$303,000	Deferred Maintenance Repair/Replace
1694	Pier 80 - Gear & Maintenance Building - Super - Seismic	\$762,000	Code Compliance
237	Pier 80 - Office Building #1 - interior utilities	\$111,000	Deferred Maintenance Repair/Replace
1129	Pier 80 - Office Building #1 - Super - R/R	\$6,000	Deferred Maintenance Repair/Replace
1695	Pier 80 - Office Building #1 - Super - Seismic	\$31,000	Code Compliance
238	Pier 80 - Office Building #2 - interior utilities	\$10,000	Deferred Maintenance Repair/Replace
1130	Pier 80 - Office Building #2 - Super - R/R	\$6,000	Deferred Maintenance Repair/Replace
1696	Pier 80 - Office Building #2 - Super - Seismic	\$28,000	Code Compliance
625	Pier 80 - Replace two cranes with current genereration cranes	\$24,000,000	Capital Enhancement
235	Pier 80 - Service Building - interior utilities	\$149,000	Deferred Maintenance Repair/Replace
1813	Pier 80 - Service building - Painting	\$98,000	Deferred Maintenance Repair/Replace
1127	Pier 80 - Service Building - Super - R/R	\$482,000	Deferred Maintenance Repair/Replace
1697	Pier 80 - Service Building - Super - Seismic	\$605,000	Code Compliance
230	Pier 80 - Shed A - interior utilities	\$2,666,000	Deferred Maintenance Repair/Replace
1810	Pier 80 - Shed A - Painting	\$478,000	Deferred Maintenance Repair/Replace
613	Pier 80 - Shed A - Roof replacement	\$684,000	Deferred Maintenance Repair/Replace
1122	Pier 80 - Shed A - Super - R/R	\$13,090,000	Deferred Maintenance Repair/Replace
1698	Pier 80 - Shed A - Super - seismic	\$4,381,000	Code Compliance
231	Pier 80 - Shed D - interior utilities	\$812,000	Deferred Maintenance Repair/Replace
1809	Pier 80 - Shed D - Painting	\$383,000	Deferred Maintenance Repair/Replace
618	Pier 80 - Shed D - roof replacement	\$507,000	Deferred Maintenance Repair/Replace

ID#	Project Name	Estimated Cost	Project Type
1123	Pier 80 - Shed D - Super - R/R	\$2,631,000	Deferred Maintenance Repair/Replace
1699	Pier 80 - Shed D - Super - seismic	\$3,303,000	Code Compliance
1680	Pier 80 - Substructure R/R	\$6,466,000	Deferred Maintenance Repair/Replace
1681	Pier 80 - Substructure Seismic	\$20,000,000	Code Compliance
233	Pier 80 - Terminal Office - interior utilities	\$48,000	Deferred Maintenance Repair/Replace
1814	Pier 80 - Terminal Office - Painting	\$44,000	Deferred Maintenance Repair/Replace
1125	Pier 80 - Terminal Office - Super - R/R	\$67,000	Deferred Maintenance Repair/Replace
1700	Pier 80 - Terminal Office - Super - Seismic	\$67,000	Code Compliance
1162	Replace boiler at 501 Cesar Chavez	\$75,000	Deferred Maintenance Repair/Replace
1163	Replace Porta-Potty with permanent male/female restrooms	\$135,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 80:		\$87,578,000	

Pier 84

1344	Pier 84 - Copra Crane - R/R - Historical Preservation	\$600,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 84:		\$600,000	

Pier 90

51	Pier 90 - Demolition of Grain Silo & surrounding offices	\$3,000,000	Deferred Maintenance Repair/Replace
240	Pier 90 - Fire Department Building - Interior Utilities	\$20,000	Deferred Maintenance Repair/Replace
1789	Pier 90 - Fire Department Building - Sup. R/R	\$11,000	Deferred Maintenance Repair/Replace
1684	Pier 90 - Fireman's Plaza - Substructure R/R	\$180,000	Deferred Maintenance Repair/Replace
243	Pier 90 - Office Building - Interior Utilities	\$219,000	Deferred Maintenance Repair/Replace
553	Pier 90 - Office Building - Sup. R/R	\$97,000	Deferred Maintenance Repair/Replace
1790	Pier 90 - Office Building - Sup. Seismic	\$122,000	Code Compliance
775	Pier 90 - Replace approximately 350 ft fender line pier 90/92 (grain silos area)	\$1,050,000	Deferred Maintenance Repair/Replace
1683	Pier 90 - Wharf Substructure R/R	\$8,473,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 90:		\$13,172,000	

Pier 92

53	Pier 92 - Substructure R/R	\$2,160,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 92:		\$2,160,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 94			
635	New receiving and delivery lanes and scales	\$1,500,000	Capital Enhancement
1343	Pier 94 - rail track - R/R as needed	\$460,000	Deferred Maintenance Repair/Replace
633	Pier 94 - recertification and upgrade of the two existing Hyundai cranes	\$600,000	Capital Enhancement
249	Pier 94 - Wharfside Building - Interior Utilities	\$10,000	Deferred Maintenance Repair/Replace
559	Pier 94 - Wharfside Building - Superstructure R/R	\$3,000	Deferred Maintenance Repair/Replace
1791	Pier 94 - Wharfside Building - Superstructure Seismic	\$8,000	Code Compliance
634	Pier 94/96 - Perimeter security fencing	\$535,000	Capital Enhancement
1338	Pier 94/96 - Sea Wall & Substructure R/R	\$1,895,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 94:		\$5,011,000	

ID#	Project Name	Estimated Cost	Project Type
Pier 96			
943	Dredged Material Upland Rehandling Site	\$865,000	Deferred Maintenance Repair/Replace
945	High Mast Lighting Pier 94-96	\$600,000	Deferred Maintenance Repair/Replace
250	Pier 96 - Administration Building - Interior Utilities	\$1,090,000	Deferred Maintenance Repair/Replace
1816	Pier 96 - Administration Building - Painting	\$68,000	Deferred Maintenance Repair/Replace
1142	Pier 96 - Administration Building - Superstructure R/R	\$242,000	Deferred Maintenance Repair/Replace
1703	Pier 96 - Administration Building - Superstructure Seismic	\$304,000	Code Compliance
257	Pier 96 - Entry Canopy	\$216,000	Deferred Maintenance Repair/Replace
258	Pier 96 - Exit Canopy	\$129,000	Deferred Maintenance Repair/Replace
1147	Pier 96 - Flammable Liquids Building	\$3,000	Deferred Maintenance Repair/Replace
1705	Pier 96 - Flammable Liquids Building - Superstructure Seismic	\$8,000	Code Compliance
1815	Pier 96 - Gatehouse - Painting	\$38,000	Deferred Maintenance Repair/Replace
251	Pier 96 - Gatehouse Building - Interior Utilities	\$44,000	Deferred Maintenance Repair/Replace
1143	Pier 96 - Gatehouse Building - Superstructure R/R	\$122,000	Deferred Maintenance Repair/Replace
1706	Pier 96 - Gatehouse Building - Superstructure Seismic	\$61,000	Code Compliance
1817	Pier 96 - Maintenance and Repair Building - Painting	\$164,000	Deferred Maintenance Repair/Replace
254	Pier 96 - Maintenance Building - Interior Utilities	\$370,000	Deferred Maintenance Repair/Replace
1146	Pier 96 - Maintenance Building - Superstructure R/R	\$1,178,000	Deferred Maintenance Repair/Replace
1707	Pier 96 - Maintenance Building - Superstructure Seismic	\$592,000	Code Compliance
253	Pier 96 - Office/Restroom Building - Interior Utilities	\$14,000	Deferred Maintenance Repair/Replace
1145	Pier 96 - Office/Restroom Building - Superstructure R/R	\$39,000	Deferred Maintenance Repair/Replace
1708	Pier 96 - Office/Restroom Building - Superstructure Seismic	\$20,000	Code Compliance
1792	Pier 96 - Recycling/LASH Terminal - Superstructure Seismic	\$3,586,000	Code Compliance
1820	Pier 96 - Roundhouse #1 - Painting	\$55,000	Deferred Maintenance Repair/Replace
1822	Pier 96 - Roundhouse #2 - Painting	\$53,000	Deferred Maintenance Repair/Replace
1821	Pier 96 - Sand house - Painting	\$24,000	Deferred Maintenance Repair/Replace
1818	Pier 96 - Storage - Painting	\$35,000	Deferred Maintenance Repair/Replace
256	Pier 96 - Storage Building - Interior Utilities	\$3,000	Deferred Maintenance Repair/Replace
1148	Pier 96 - Storage Building - Superstructure R/R	\$112,000	Deferred Maintenance Repair/Replace
1709	Pier 96 - Storage Building - Superstructure Seismic	\$28,000	Code Compliance
58	Pier 96 - Stormwater and sewer	\$2,000,000	Deferred Maintenance Repair/Replace
259	Pier 96 - The Pound Restaurant - Interior Utilities	\$28,000	Deferred Maintenance Repair/Replace
1149	Pier 96 - The Pound Restaurant - Superstructure R/R	\$46,000	Deferred Maintenance Repair/Replace
1704	Pier 96 - The Pound Restaurant - Superstructure Seismic	\$115,000	Code Compliance
778	Repair Railroad Track pier 96 & appropriate leads	\$425,000	Deferred Maintenance Repair/Replace
1176	Retamp, apply ballast & re-establish proper drainage within ICTF.	\$2,700,000	Deferred Maintenance Repair/Replace

ID#	Project Name	Estimated Cost	Project Type
Estimated Total - Pier 96:		\$15,377,000	
Pier 98			
1503	Hérons Head Park Public Access Maintenance	\$50,000	Code Compliance
764	Replace Porta-Potty with permanent male/female restrooms	\$135,000	Capital Enhancement
372	Shoreline Stabilization	\$100,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 98:		\$285,000	
Ferry Plaza			
647	Ferry Pier Improvements	\$3,000,000	Capital Enhancement
Estimated Total - Ferry Plaza:		\$3,000,000	
Pier 27			
139	Pier 27 - Office Annex - Interior utilities	\$158,000	Deferred Maintenance Repair/Replace
1538	Pier 27 - Office Annex - Superstructure - R/R	\$175,000	Deferred Maintenance Repair/Replace
482	Pier 27 - Office Annex - Superstructure - Seismic	\$44,000	Code Compliance
138	Pier 27 - Office/Admin Building - Interior utilities	\$515,000	Deferred Maintenance Repair/Replace
1848	Pier 27 - Office/Admin Building - Superstructure - R/R	\$86,000	Deferred Maintenance Repair/Replace
481	Pier 27 - Office/Admin Building - Superstructure - Seismic	\$144,000	Code Compliance
14	Pier 27 - Office/Admin Building and Annex - Mills - Demo	\$255,000	Deferred Maintenance Repair/Replace
Estimated Total - Pier 27:		\$1,377,000	
Pier 50 Administrative Building			
373	Asbestos removal -crawlspce and attic	\$75,000	Deferred Maintenance Repair/Replace
1634	Pier 50 Administration Building - Interior utilities	\$920,000	Deferred Maintenance Repair/Replace
1713	Pier 50 Administration Building - Substructure R/R	\$33,000	Deferred Maintenance Repair/Replace
1714	Pier 50 Administration Building - Substructure Seismic	\$115,000	Code Compliance
1633	Pier 50 Administration Building - Superstructure R/R	\$57,000	Deferred Maintenance Repair/Replace
512	Pier 50 Administration Building - Superstructure Seismic	\$144,000	Code Compliance
Estimated Total - Pier 50 Administrative Building:		\$1,344,000	
Ferry Building / World Trade Center			
157	Fac. 200 World Trade Club Restaurant	\$525,000	Deferred Maintenance Repair/Replace
1715	Fac. 200 World Trade Club Restaurant - Super - R/R	\$468,000	Deferred Maintenance Repair/Replace
1716	Fac. 200 World Trade Club Restaurant - Super - Seismic	\$587,000	Code Compliance
Estimated Total - Ferry Building / World Trade Center:		\$1,581,000	

ID#	Project Name	Estimated Cost	Project Type
Agriculture Building			
158	Fac. 278 Agriculture Building - Interior utilities	\$1,554,000	Deferred Maintenance Repair/Replace
492	Fac. 278 Agriculture Building - Substructure R/R	\$3,767,000	Deferred Maintenance Repair/Replace
27	Fac. 278 Agriculture Building - Substructure Seismic	\$2,065,000	Code Compliance
1686	Fac. 278 Agriculture Building - Superstructure R/R	\$1,726,000	Deferred Maintenance Repair/Replace
1685	Fac. 278 Agriculture Building - Superstructure Seismic	\$433,000	Code Compliance
Estimated Total - Agriculture Building:		\$9,545,000	
Pier 80 Admin. Building			
232	Pier 80 - Administration Building	\$1,481,000	Deferred Maintenance Repair/Replace
935	Pier 80 - Administration Building (501 Cesar Chavez) - Roof Replacement	\$55,000	Deferred Maintenance Repair/Replace
1124	Pier 80 - Administration Building (501 Cesar Chavez) - Super - R/R	\$685,000	Deferred Maintenance Repair/Replace
1718	Pier 80 - Administration Building (501 Cesar Chavez) - Super - Seismic	\$859,000	Code Compliance
Estimated Total - Pier 80 Admin. Building:		\$3,080,000	
Sea Wall Lot 301			
1213	Mason Street Connection	\$400,000	Capital Enhancement
643	Taylor Street Plaza	\$800,000	Capital Enhancement
Estimated Total - Sea Wall Lot 301:		\$1,200,000	

ID#	Project Name	Estimated Cost	Project Type
Sea Wall Lot 302			
83	Pompei's Grotto - Interior utilities	\$131,000	Deferred Maintenance Repair/Replace
1656	Pompei's Grotto - Superstructure R/R	\$129,000	Deferred Maintenance Repair/Replace
1657	Pompei's Grotto - Superstructure Seismic	\$81,000	Code Compliance
89	Scoma's (Smoke House) - Interior utilities	\$252,000	Deferred Maintenance Repair/Replace
1674	Scoma's (Smoke House) - Substructure R/R	\$738,000	Deferred Maintenance Repair/Replace
1675	Scoma's (Smoke House) - Substructure Seismic	\$302,000	Code Compliance
277	Scoma's (Smoke House) - Superstructure - Seismic	\$94,000	Code Compliance
389	Scoma's (Smoke House) - Superstructure R/R	\$262,000	Deferred Maintenance Repair/Replace
1760	Street Repair - Al Scoma Way	\$45,000	Deferred Maintenance Repair/Replace
1761	Street Repair - Fish Alley	\$90,000	Deferred Maintenance Repair/Replace
1762	Street Repair - Pier 47	\$142,000	Deferred Maintenance Repair/Replace
385	SWL 302 Castagnola's Rest. - Superstructure Seismic	\$178,000	Deferred Maintenance Repair/Replace
87	SWL 302 Castagnola's Rest.- Interior utilities	\$160,000	Deferred Maintenance Repair/Replace
1671	SWL 302 Castagnola's Rest.- Substructure R/R	\$158,000	Deferred Maintenance Repair/Replace
1672	SWL 302 Castagnola's Rest.- Substructure Seismic	\$390,000	Code Compliance
88	SWL 302 Castagnola's/Storage Building - Interior Utilities	\$15,000	Deferred Maintenance Repair/Replace
867	SWL 302 Coast Marine Supply Mat. Storage Building - Superstructure R/R	\$651,000	Deferred Maintenance Repair/Replace
1668	SWL 302 Coast Marine Supply Mat. Storage Building - Superstructure Seismic	\$408,000	Code Compliance
65	SWL 302 Port Harbor Office	\$11,000	Deferred Maintenance Repair/Replace
82	SWL 302-Alioto Fish Co. - Interior utilities	\$95,000	Deferred Maintenance Repair/Replace
1664	SWL 302-Alioto Fish Co. - Superstructure R/R	\$246,000	Deferred Maintenance Repair/Replace
1665	SWL 302-Alioto Fish Co. - Superstructure Seismic	\$309,000	Code Compliance
72	SWL 302-Coast Marine Industrial Supply - Interior Utilities	\$335,000	Deferred Maintenance Repair/Replace
81	SWL 302-Cory Gallery - Interior utilities	\$107,000	Deferred Maintenance Repair/Replace
1666	SWL 302-Cory Gallery - Superstructure R/R	\$79,000	Deferred Maintenance Repair/Replace
1667	SWL 302-Cory Gallery - Superstructure Seismic	\$40,000	Code Compliance
85	SWL 302-Crab Boat Owners Assn.- Interior utilities	\$190,000	Deferred Maintenance Repair/Replace
1658	SWL 302-Crab Boat Owners Assn.- Superstructure R/R	\$21,000	Deferred Maintenance Repair/Replace
1659	SWL 302-Crab Boat Owners Assn.- Superstructure Seismic	\$53,000	Code Compliance
84	SWL 302-D & G Co. d.b.a. Lou's Blues - Interior utilities	\$37,000	Deferred Maintenance Repair/Replace
1662	SWL 302-D & G Co. d.b.a. Lou's Blues - Superstructure R/R	\$33,000	Deferred Maintenance Repair/Replace
1663	SWL 302-D & G Co. d.b.a. Lou's Blues - Superstructure Seismic	\$41,000	Code Compliance
79	SWL 302-Frank's Fisherman's Supply - Interior utilities	\$258,000	Deferred Maintenance Repair/Replace
1660	SWL 302-Frank's Fisherman's Supply - Superstructure R/R	\$255,000	Deferred Maintenance Repair/Replace
1661	SWL 302-Frank's Fisherman's Supply - Superstructure Seismic	\$160,000	Code Compliance

ID#	Project Name	Estimated Cost	Project Type
383	Wharf J-9 - Substructure R/R	\$2,220,000	Deferred Maintenance Repair/Replace
1669	Wharf J-9 - Substructure Seismic	\$674,000	Code Compliance
Estimated Total - Sea Wall Lot 302:		\$9,390,000	

Sea Wal Lot 303

1841	SWL 303 - Alioto Fish Co - Superstructure R/R	\$69,000	Deferred Maintenance Repair/Replace
1844	SWL 303 - SP trantino's/Martell Ins - Superstructure Seismic	\$64,000	Deferred Maintenance Repair/Replace
3	Seawall lot 303 parking lot improvements, and landscaping	\$150,000	Capital Enhancement
1763	Street Repair - Fish Alley	\$90,000	Deferred Maintenance Repair/Replace
1764	Street Repair - Hyde Alley	\$116,000	Deferred Maintenance Repair/Replace
69	SWL 303 - Alioto Fish Co - Interior Utilities	\$78,000	Deferred Maintenance Repair/Replace
1842	SWL 303 - Alioto Fish Co - Superstructure Seismic	\$87,000	Deferred Maintenance Repair/Replace
70	SWL 303 - Cal Shell Fish - Interior Utilities	\$86,000	Deferred Maintenance Repair/Replace
1839	SWL 303 - Cal Shell Fish - Superstructure R/R	\$76,000	Deferred Maintenance Repair/Replace
1840	SWL 303 - Cal Shell Fish - Superstructure Seismic	\$95,000	Deferred Maintenance Repair/Replace
71	SWL 303 - Cioppino's - Interior Utilities	\$130,000	Deferred Maintenance Repair/Replace
1837	SWL 303 - Cioppino's - Superstructure R/R	\$116,000	Deferred Maintenance Repair/Replace
1838	SWL 303 - Cioppino's - Superstructure Seismic	\$145,000	Deferred Maintenance Repair/Replace
68	SWL 303 - SP trantino's/Martell Ins - Interior Utilities	\$81,000	Deferred Maintenance Repair/Replace
1843	SWL 303 - SP trantino's/Martell Ins - Superstructure R/R	\$26,000	Deferred Maintenance Repair/Replace
260	SWL 303 United Shellfish Pressng Bldng - Interior utilities	\$19,000	Deferred Maintenance Repair/Replace
272	SWL 303 United Shellfish Pressng Bldng - Superstructure R/R	\$67,000	Deferred Maintenance Repair/Replace
384	SWL 303 United Shellfish Pressng Building - Superstructure Seismic	\$33,000	Code Compliance
1677	SWL 303 United Shellfish Processing Building - Substructure R/R	\$141,000	Deferred Maintenance Repair/Replace
1676	SWL 303 United Shellfish Processing Building - Substructure Seismic	\$70,000	Code Compliance
895	Wharf J-10 Removal and Replacement	\$4,693,000	Deferred Maintenance Repair/Replace
Estimated Total - Sea Wal Lot 303:		\$6,432,000	

Sea Wall Lot 318

132	SWL 318 Roundhouse Two	\$350,000	Deferred Maintenance Repair/Replace
133	SWL 318 Sandhouse	\$25,000	Deferred Maintenance Repair/Replace
Estimated Total - Sea Wall Lot 318:		\$375,000	

ID#	Project Name	Estimated Cost	Project Type
Sea Wall Lot 345			
1877	Pier 70 - Complete Rehab Building Kneass Boatworks - Office	\$330,000	Deferred Maintenance Repair/Replace
1876	Pier 70 - Complete Rehab Building Kneass Boatworks - Repair & Storage	\$908,000	Deferred Maintenance Repair/Replace
200	SWL 345 SF Boat Works Office/Shop Building	\$217,000	Deferred Maintenance Repair/Replace
525	SWL 345 SF Boat Works Office/Shop Building	\$301,000	Deferred Maintenance Repair/Replace
201	SWL 345 SF Boat Works Storage Warehouse	\$15,000	Deferred Maintenance Repair/Replace
Estimated Total - Sea Wall Lot 345:		\$1,771,000	

Sea Wall Lot 349

1892	Pier 70 - Complete Rehab Building #114 - UIW Machine Shop	\$2,064,000	Deferred Maintenance Repair/Replace
1893	Pier 70 - Complete Rehab Building #115 - Brass Foundry	\$4,523,000	Deferred Maintenance Repair/Replace
1894	Pier 70 - Complete Rehab Building #116 - Foundry	\$4,523,000	Deferred Maintenance Repair/Replace
1895	Pier 70 - Complete Rehab Building #117 - Warehouse #9 Shipyard Training Center	\$8,269,000	Deferred Maintenance Repair/Replace
1881	Pier 70 - Complete Rehab Building #12 - Plate Shop #2	\$16,062,000	Deferred Maintenance Repair/Replace
1882	Pier 70 - Complete Rehab Building #14 - Granny's Movers	\$4,268,000	Deferred Maintenance Repair/Replace
1883	Pier 70 - Complete Rehab Building #15 - Beth Street Layout Yard	\$2,694,000	Deferred Maintenance Repair/Replace
1884	Pier 70 - Complete Rehab Building #16 - Beth Street Stress Relieving	\$1,133,000	Deferred Maintenance Repair/Replace
1885	Pier 70 - Complete Rehab Building #19 - Garage #1	\$967,000	Deferred Maintenance Repair/Replace
1878	Pier 70 - Complete Rehab Building #2 - Warhouse #2	\$16,741,000	Deferred Maintenance Repair/Replace
1886	Pier 70 - Complete Rehab Building #21 - Machine Shop	\$2,879,000	Deferred Maintenance Repair/Replace
1887	Pier 70 - Complete Rehab Building #25 - Beth Street Washroom & Locker	\$210,000	Deferred Maintenance Repair/Replace
1888	Pier 70 - Complete Rehab Building #29 - Beth Street Washroom & Locker	\$1,046,000	Deferred Maintenance Repair/Replace
1889	Pier 70 - Complete Rehab Building #32 - Beth Street Warehouse	\$1,390,000	Deferred Maintenance Repair/Replace
1890	Pier 70 - Complete Rehab Building #55	\$49,000	Deferred Maintenance Repair/Replace
1879	Pier 70 - Complete Rehab Building #6 - Light Warehouse	\$6,002,000	Deferred Maintenance Repair/Replace
1891	Pier 70 - Demolition Building #66 - Beth Street Welding Shop	\$479,000	Deferred Maintenance Repair/Replace
1880	Pier 70 - Complete Rehab Building #11 - Noonan Building	\$9,243,000	Deferred Maintenance Repair/Replace
Estimated Total - Sea Wall Lot 349:		\$82,542,000	

Sea Wall Lot 3492

1896	Pier 70 - Complete Rehab Building #113 - UIW machine Shop	\$23,446,000	Deferred Maintenance Repair/Replace
1899	Pier 70 - Complete Rehab Building #23 - Test Room	\$685,000	Deferred Maintenance Repair/Replace
1900	Pier 70 - Complete Rehab Building #24 - Beth Street Washroom & Locker	\$917,000	Deferred Maintenance Repair/Replace
Estimated Total - Sea Wall Lot 3492:		\$25,048,000	

ID#	Project Name	Estimated Cost	Project Type
Sea Wall Lot 352			
54	Backlands Redevelopment - Grading	\$1,100,000	Deferred Maintenance Repair/Replace
Estimated Total - Sea Wall Lot 352:		\$1,100,000	
Tonquin Street			
1380	Harbor Office at Hyde St. (Blue Shed Building)	\$400,000	Deferred Maintenance Repair/Replace
Estimated Total - Tonquin Street:		\$400,000	
Hyde Street			
1765	Street Repair - Hyde Street north of Jefferson to Hyde St. Pier	\$166,000	Deferred Maintenance Repair/Replace
Estimated Total - Hyde Street:		\$166,000	
Jefferson St. - Hyde to Leavenworth			
902	Fisherman's Wharf Lighting Improvements, Phase II	\$440,000	Deferred Maintenance Repair/Replace
904	Roadway Pavement and Sidewalk Construction - Jefferson St.	\$893,000	Deferred Maintenance Repair/Replace
1766	Street Repair - Jefferson Street from Leavenworth to Hyde	\$66,000	Deferred Maintenance Repair/Replace
1767	Street Repair - Jefferson Street north half of block without Hyde	\$24,000	Deferred Maintenance Repair/Replace
Estimated Total - Jefferson St. - Hyde to Leavenworth:		\$1,423,000	
Leavenworth Street			
4	New catch basins and possible pump station upgrade	\$110,000	Deferred Maintenance Repair/Replace
1768	Street Repair - Richard Henry Dana Drive (Leavenworth) north of Jefferson	\$102,000	Deferred Maintenance Repair/Replace
Estimated Total - Leavenworth Street:		\$212,000	
Jefferson Street - Leavenworth to Jones			
873	Jones to Hyde Street Sidewalk Project - ADA improvements?	\$500,000	Deferred Maintenance Repair/Replace
1769	Street Repair - Jefferson Street between Jones and Leavenworth	\$86,000	Deferred Maintenance Repair/Replace
Estimated Total - Jefferson Street - Leavenworth to Jones:		\$586,000	
Taylor Street - Jefferson to Pier 45			
905	Taylor Street Roadway Improvements	\$212,000	Deferred Maintenance Repair/Replace
376	Tie-in Taylor Street Storm Sewers to City Sewer	\$200,000	Code Compliance
Estimated Total - Taylor Street - Jefferson to Pier 45:		\$412,000	
Embarcadero Street - Taylor to Powell			
903	Repair of Roadway and Seawall at Embarcadero and Taylor St.	\$750,000	Deferred Maintenance Repair/Replace
Estimated Total - Embarcadero Street - Taylor to Powell:		\$750,000	

ID#	Project Name	Estimated Cost	Project Type
Lombard / Sansome Street			
1770	Street Repair - Lombard Street between Sansome and Embarcadero	\$124,000	Deferred Maintenance Repair/Replace
Estimated Total - Lombard / Sansome Street:		\$124,000	
Commerce / Front / Union / Green Stre			
1771	Street Repair - Green Street between Davis and Front	\$116,000	Deferred Maintenance Repair/Replace
Estimated Total - Commerce / Front / Union / Green Streets:		\$116,000	
Broadway / Davis Street			
875	Broadway Streetscape Project	\$50,000	Capital Enhancement
1773	Street Repair - Broadway between Davis and Embarcadero	\$186,000	Deferred Maintenance Repair/Replace
1772	Street Repair - Davis Street between Broadway and Vallejo	\$164,000	Deferred Maintenance Repair/Replace
Estimated Total - Broadway / Davis Street:		\$400,000	
Third / China Basin Streets			
1774	Street Repair - Terry Francois Blvd. along China Basin	\$349,000	Deferred Maintenance Repair/Replace
Estimated Total - Third / China Basin Streets:		\$349,000	
China Basin / Mission Rock			
1775	Street Repair - Terry Francois Blvd. between China Basin and Mission Rock	\$1,875,000	Deferred Maintenance Repair/Replace
1776	Street Repair - Terry Francois Blvd. between Mission Rock and	\$640,000	Deferred Maintenance Repair/Replace
1777	Street Repair - Terry Francois Blvd. between Realignment and Illinois	\$1,135,000	Deferred Maintenance Repair/Replace
Estimated Total - China Basin / Mission Rock:		\$3,650,000	
Twentieth Street			
1778	Street Repair - 20th Street east of illinois	\$318,000	Deferred Maintenance Repair/Replace
Estimated Total - Twentieth Street:		\$318,000	
Illinois / Michigan / 24th / 25th Streets			
1779	Street Repair - 24th Street from Michigan to Maryland	\$376,000	Deferred Maintenance Repair/Replace
1780	Street Repair - 25th between Illinois and Michigan	\$67,000	Deferred Maintenance Repair/Replace
1781	Street Repair - 25th between Michigan and Maryland	\$396,000	Deferred Maintenance Repair/Replace
Estimated Total - Illinois / Michigan / 24th / 25th Streets:		\$839,000	

ID#	Project Name	Estimated Cost	Project Type
Army / Maryland Streets			
1346	Islais Creek- Tulare Park	\$400,000	Deferred Maintenance Repair/Replace
1782	Street Repair - Marin Street east of Michigan	\$116,000	Deferred Maintenance Repair/Replace
Estimated Total - Army / Maryland Streets:		\$516,000	
Tulare Street			
1785	Street Repair - Indiana Street between Tulare and Marin	\$84,000	Deferred Maintenance Repair/Replace
1786	Street Repair - Marin between Indiana and Tennessee	\$174,000	Deferred Maintenance Repair/Replace
1784	Street Repair - Minnesota Street between Tulare and Marin	\$269,000	Deferred Maintenance Repair/Replace
1783	Street Repair - Tennessee between Tulare and Marin	\$84,000	Deferred Maintenance Repair/Replace
Estimated Total - Tulare Street:		\$611,000	
Amador Street			
780	Repair Railroad Track Amador Street to Darling Delaware	\$235,000	Deferred Maintenance Repair/Replace
1787	Street Repair - Amador Street	\$1,219,000	Deferred Maintenance Repair/Replace
1788	Street Repair - Amador Street Extension	\$481,000	Deferred Maintenance Repair/Replace
1350	Terry Francois Blvd.	\$200,000	Deferred Maintenance Repair/Replace
377	Tie-in of Darling Storm Sewers to City Sewer	\$540,000	Deferred Maintenance Repair/Replace
Estimated Total - Amador Street:		\$2,675,000	
Cargo Way / Third Street			
1342	Quint Street Freight Rail	\$1,000,000	Deferred Maintenance Repair/Replace
Estimated Total - Cargo Way / Third Street:		\$1,000,000	
Fisherman's Wharf Harbor			
963	Wharf J-4	\$685,000	Deferred Maintenance Repair/Replace
Estimated Total - Fisherman's Wharf Harbor:		\$685,000	
H1			
63	Blue Shed Building (Wharf J-11) - Demolition	\$108,000	Deferred Maintenance Repair/Replace
468	Blue Shed Building (Wharf J-11) - Rebuild	\$1,000,000	Capital Enhancement
380	Hyde Street Fuel Dock - Substructure R/R	\$75,000	Deferred Maintenance Repair/Replace
1051	Hyde Street Fuel Dock - Substructure Seismic	\$75,000	Code Compliance
64	Hyde Street Fuel Dock - Utilities	\$51,000	Deferred Maintenance Repair/Replace
961	Wharf J-11	\$319,000	Deferred Maintenance Repair/Replace
Estimated Total - H1:		\$1,628,000	

ID#	Project Name	Estimated Cost	Project Type
Intermodal Container Transfer Facility			
1341	ICTF Freight Yard - rail repair, repavement	\$2,660,000	Deferred Maintenance Repair/Replace
1488	Notch tunnels 1 and 2 for added cargo capacity	\$18,000,000	Capital Enhancement
776	Patch Repair Asphalt, apply Seal Coat ICTF	\$650,000	Deferred Maintenance Repair/Replace
Estimated Total - Intermodal Container Transfer Facility:		\$21,310,000	
Equip			
1181	Conveyer Roof Loader - Equipment	\$44,000	Capital Enhancement
1170	Replace Mobile Piledriving Crane	\$770,000	Capital Enhancement
1171	Replace Piledriver #1 Drive Diesel Engine	\$160,000	Capital Enhancement
1172	Replace Piledriver #4 Drive Diesel Engine	\$225,000	Capital Enhancement
1173	Replace Pusher Boat "Mission Rock" Drive Diesel Engines	\$190,000	Capital Enhancement
Estimated Total - Equip:		\$1,389,000	
Portwide			
1846	Condition Surveys and Designs	\$3,000,000	Deferred Maintenance Repair/Replace
1383	Dredging Portwide - 10 years* (unique project - see description)	\$25,000,000	Deferred Maintenance Repair/Replace
1845	Emergency Funding	\$10,000,000	Deferred Maintenance Repair/Replace
Estimated Total - Portwide:		\$38,000,000	
Total for All Projects:		\$1,144,968,000	

Appendix B: Seismic Risk to Port Facilities

The purpose of this appendix is to provide an overview of seismic risk to Port facilities.

Bay Area earthquakes result from strain accumulating between the Pacific and North American tectonic plates. The Bay Area experienced large earthquakes in 1838, 1868, 1906, and 1989, and according to the U.S. Geological Survey (USGS) “future large earthquakes to relieve this accumulating strain are a certainty.”

“On the basis of research conducted since the 1989 Loma Prieta earthquake, [USGS] and other scientists conclude that there is a **62% probability of at least one magnitude 6.7** or greater quake, capable of causing widespread damage, striking the San Francisco Bay region before 2032. Major quakes may occur in any part of this rapidly growing region. This emphasizes the urgency for all communities in the Bay region to continue preparing for earthquakes.”¹

The following are pertinent facts about seismic risk, building codes and seismic improvements as they relate to Port facilities.

Seismic Risk on Port Property

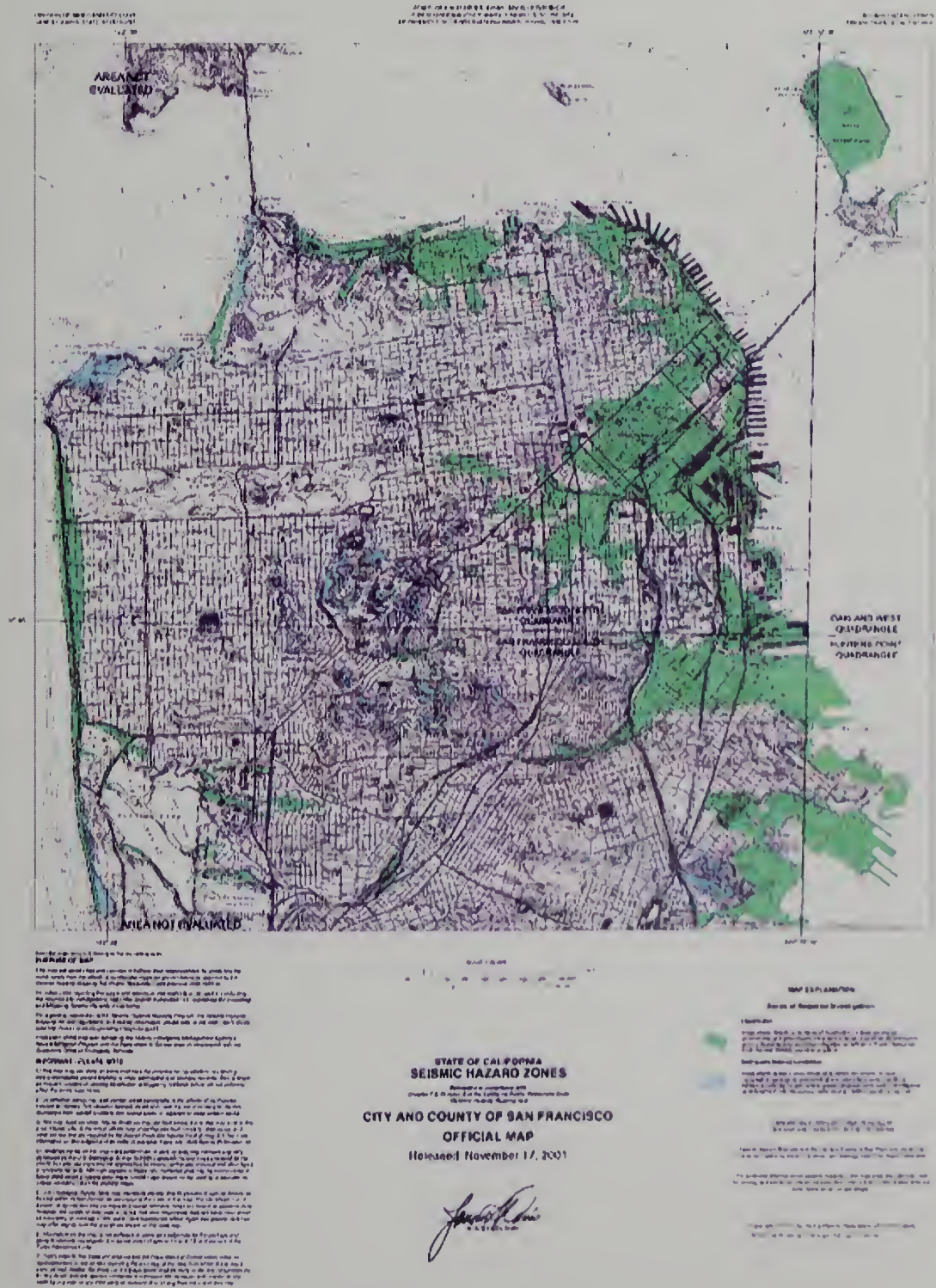
There are two principal risks associated with a major earthquake affecting Port property:

1. its location within a seismic hazard area defined by the USGS; and
2. the construction of many Port facilities prior to the adoption of even the most rudimentary seismic building code standards.

Figure B1 shows the USGS seismic hazard areas in San Francisco. Virtually all of Port property is defined as a seismic hazard area. Generally speaking, seismic hazard maps are used to interpret the application of seismic building standards, insurance rates, estimations of ground stability, retrofit priorities and allocation of Federal Emergency Management Association education and preparedness funding.

¹ U.S. Geological Survey, Open-File Report 03-214, Summary of Earthquake Probabilities in the San Francisco Bay Region: 2003-2032, The Working Group on California Earthquake Probabilities

Figure B1
2001 Official City and County of San Francisco Seismic Hazard Map



USGS projects a high risk of liquefaction along Port property. Liquefaction occurs when strong shaking causes loose, saturated soils that lack cohesion to lose shear strength. Strong shaking is a likely phenomenon on Port property:

“During the Loma Prieta earthquake, the USGS and [California Division of Mines and Geology] obtained the first set of recordings of damaging levels of shaking on a wide variety of geologic materials, including soft, unconsolidated sand and clay. These records clearly document that ground shaking is much more violent on the soft sediments around the Bay margins than on bedrock, confirming previous USGS projections. Most importantly, these records provided a firm basis for revising building codes to more fully reflect the need for extra strength in structures built on soft ground.”²

The City most recently analyzed seismic risk related to Port property related to the proposed construction of the San Francisco Electric Reliability Project proposed for approximately four acres of the Western Pacific parcel, close to Pier 80³. The Project’s Application for Certification to the California Energy Commission analyzes a variety of seismic risks associated with construction on Port property.

The analysis, primarily based on a review of USGS publications, shows the following probabilities of events on nearby faults:

Fault	Distance from Western Pacific site (Pier 80)	Probability of Mw 6.7 or Greater Earthquake within 30 Years	Maximum Credible Earthquake
San Andreas	8 miles	21%	Mw 7.9 (rupture on all 4 segments)
San Gregorio	12 miles	10%	Mw 7.3
Hayward and Rogers Creek	10 miles	27%	Mw 7.3 (rupture on all 3 segments)
Calaveras	21 miles	11%	Mw 6.9
Concord-Green Valley	24 miles	3%	Mw 6.7
Greenville-Marsh Creek	28 miles	3%	Mw 6.9

The analysis also predicts:

² U.S. Geological Survey Fact Sheet 151-99, “Progress Toward a Safer Future Since the 1989 Loma Prieta Earthquake”, Online Version 1.0

³ This project is still early in its approval track and requires further approvals, including approvals from the California Energy Commission, the Port Commission, the San Francisco Public Utilities Commission and the San Francisco Board of Supervisors. The Application for Certification can be found on-line at: http://www.energy.ca.gov/sitingcases/sanfrancisco/documents/applicant/AFC_CD-ROM/Vol_1/

1. high risk of strong ground shaking, with ground acceleration as high as 0.48 g to 0.53 g;
2. moderate to high risk of liquefaction, based on a variety of factors, including unknown fill characteristics;
3. low to negligible risk of other earthquake related phenomena, such as ground rupture, mass wasting, subsidence and expansive soils.

Seismic Building Code Standards and the Age of Port Facilities

Building codes in California have typically been amended to address seismic standards for new construction/rehabilitation in the aftermath of major earthquakes. The 1933 Long Beach earthquake, the 1971 San Fernando earthquake, the 1989 Loma Prieta earthquake and the 1994 Northridge earthquake all led to advances in seismic standards and/or understanding of how prior construction methods fared poorly in major seismic events. Prior to 1933, California building codes did not address seismic standards.

Many Port facilities in the northern waterfront and in the Pier 70 area were constructed before 1933. Some Pier 70 buildings, including several that have been closed, are unreinforced masonry buildings known to perform poorly in major seismic events. Other Port facilities, including many piers, employ non-ductile concrete pilings that have performed poorly during major earthquakes in other locations.

Most piers structures in the northern waterfront have recently been evaluated to determine code compliance with vertical load carrying requirements. Facilities found to be structurally deficient in specific vertical load carrying requirements have been either closed or have had their uses restricted to appropriate activities. These facilities have not been analyzed individually to determine potential seismic performance.

In the 1906 earthquake, the Ferry Building was extensively damaged. All of the Port's finger piers were constructed between 1908 and 1938, so therefore were not tested in 1906 earthquake. The 1989 Loma Prieta earthquake caused damage to some Port facilities. Pier 45 and Building 111 at Pier 70 suffered serious damage. Damage to battered piles and seawalls were noted under the substructures of several piers. Liquefaction of fills and subsequent ground settlement at various places along the waterfront, in particular at Pier 45 and along Embarcadero, were also recorded.

Port facilities must be seismically upgraded per current San Francisco Building Code (Port Building Code) requirements when certain triggering events occur, including some changes in occupancy and certain types of repairs, additions, or upgrades exceeding specific limits as defined in the code.

The following facilities in the central and northern waterfront have been seismically upgraded since 1989 to meet modern building code standards in use at the time of the retrofit:

- Pier 48
- SBC Park
- Ferry Building and Ferry Plaza
- Pier 1
- Pier 1.5-3-5
- Pier 45
- Aquarium by the Bay
- Piers 27/29

Facilities that meet modern code standards are not guaranteed to withstand a major earthquake; however, these upgraded facilities are much better prepared to absorb and dissipate earthquake energy. Facilities that have not been upgraded are more prone to failure. For piers, possible catastrophic outcomes could be caused by collapse or serious failure of pier substructures, collapse of pier superstructures, or fire induced by severing of utility infrastructure or a similar event. Unreinforced masonry buildings such as Buildings 104 and 113 in Pier 70 (both unoccupied) could also fail. Unreinforced masonry in-fill steel buildings are also expected to perform poorly. The consequences of such damage could include loss of life or injury to Port tenants or visitors, major economic damage to the Port, its tenants and the City, and permanent loss of historic buildings.

Capital Plan Estimates for Seismic Upgrades

The Plan's current estimated cost for seismic work needed to upgrade Port facilities to modern seismic standards is approximately \$196 million in substructure work related to the Port's piers (\$43 million for Pier 30-32 alone), and an additional \$110 million in seismic work to reinforce Port buildings, including approximately \$46 million for seismic retrofit of historic buildings at Pier 70.

Looking Forward

Response to a major disaster such as an earthquake can be divided into three segments: preparation, response (to immediate aftermath), and recovery. Arguably, the most important work involves preparation in advance of a disaster. For this reason, Port staff view seismic improvements as among the most pressing needs addressed by the capital plan.

In response to foreseeable disasters such as Hurricane Katrina, policymakers at the local and state level are grappling with funding questions such as how to protect the City's trauma center and how to reinforce Delta levees. As experts devise new standards for construction, policymakers will also have to decide whether to impose more stringent standards for existing structures. Such mandates (such as requirements to reinforce Unreinforced Masonry Buildings) have enormous economic implications.

The time may come when seismic upgrades to at-risk facilities will be required by building code and will likely require upgrades by specific dates. This concept is called an

“existing building code” approach, and was used in San Francisco to deal with unreinforced masonry buildings. Such a mandate could have major consequences for Port facilities and the Port’s economic future, since a number of the Port’s facilities are constructed of framing systems that are known to perform poorly in a major seismic event. These systems include non-ductile concrete, masonry in-fill walls and batter piles.

Both the City and the Port have been and continue to be aggressive in planning response activities in the event of a disaster. The City’s efforts are spearheaded by the Mayor’s Office of Emergency Services. Recommendations for individuals and businesses can be obtained by visiting www.72hours.org . The Port has recently hired a Director of Homeland Security, whose responsibilities include disaster preparedness. The Port is currently planning multiple exercises related to a major seismic event with the City and State Offices of Emergency Services, as well as other city departments, federal partners, and First Responders.

The Port, if it is not too damaged itself, could play a significant role in regional recovery in the aftermath of a major seismic event. In addition to ferry transit services, the Port could provide pier space for ships delivering supplies or providing other logistics necessary to support the city, it’s inhabitants, and workers; warehouse facilities to store incoming goods and supplies; staging areas for rescue operations; and storage and processing of debris removed from other parts of San Francisco. As of this writing, many displaced New Orleans residents remain temporarily housed in ships berthed in the area. It is likely that the Port will fill these and other critical roles in the Bay Area’s response to, and recovery from, a major seismic event. Looking forward, it behooves us to give serious focus to preparation for such an event. As a public agency we, the Port, must be able to responsibly fill any roles required of us.

